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Urban wage-rate trends in manufacturing

Prices in fourth quarter and year 1946

Postwar labor turn-over among women factory workers

Collective bargaining with associations and groups of employers

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LAWRENCE R. KLEIN, Editor

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This Issue in Brief

Urban wage-rate trends in manufacturing industries, October 1946

The trend of wage rates in manufacturing industries continued upward throughout the calendar year 1946, as industry gradually adjusted to the patterns of wage increase established by important wage negotiations during the first quarter of the year. At the end of the year, however, postwar gains had been virtually offset by increases in the prices of consumer goods. During the last quarter of the year, new patterns of wage increase were forming in some consumer-goods industries, and preparations were under way for reopening wage negotiations in the durable-goods industries. Page 369.

Prices in the fourth quarter and year 1946

Price advances during 1946 were larger than in any other year since World War I and many times the moderate rises of the three preceding years, as primary market prices increased 31.6 percent and retail prices 18.0 percent. Increases over the year were led by advances for agricultural commodities, but there were substantial increases for nonagricultural commodities as well. Price decontrol developments were a major factor in the rapid advance of prices, especially after June 30. Following the sharp increases in the third quarter, prices again rose rapidly during the fourth quarter. Page 378.

Postwar labor turn-over among women factory workers

Women have retained 1 million of the 2½ million production jobs they acquired during the war period. Almost half the increase in women's jobs was concentrated in the durable-goods industries traditionally staffed by men. Involuntary separation rates, representing mostly lay-offs, were higher for women than for men in iron and steel, automobiles, and the machinery groups. Seniority rights acquired by women as a result of wartime employment kept their separation rates in these groups from reaching even higher levels. With the exception of a brief period immediately after the end of the war, quits, in the postwar as in the war period, comprised the bulk of women's separations from factory jobs. These high quit rates, however, indicate job shifting as well as withdrawals from the labor force. Hiring rates of women were high, but much of the hiring was in order to replace women who had quit their jobs. Page 411.

Full employment patterns, 1950: Part 2

The article on page 420 summarizes a detailed quantitative analysis of what may be involved in achieving and maintaining high and stable levels of employment after full adjustment to peacetime conditions. Basic factors which determine the rates of production required to maintain full employment include the size of the labor force and levels of output per man-hour, and both are subject to continuous long-run growth. It is estimated that a volume of industrial production averaging 90 percent above 1939 may be implied by full employment in 1950, although there would be great variation from industry to industry. For some industries, a substantial expansion in capacity might be needed. If the conditions assumed in the analysis were realized, wage rates and rates of return on investment above the 1946 levels could be maintained with prices below those now prevailing. Furthermore, the high levels of income generated could yield

high tax revenue totals at moderate tax rates. The analysis embodies no unconditional forecasts for the year 1950, but traces the logical consequences of a series of specific assumptions about that year. Individually, none of these can be regarded as certain. Part 1 of this summary appeared in the February issue of the Monthly Labor Review.

Union wages and hours in the printing, trucking, local transit, and baking industries, 1946

On July 1, 1946, hourly scales of wages for union printing trades workers averaged $1.58 and for local transit operating employees $1.10. Both rates were 17 percent higher than on July 1, 1945. Baking workers averaged $1.00, a 15 percent increase and trucking employees $1.13, an 11 percent increase. Practically all printing and local transit members—93 percent of the baking workers and 86 percent of the motortruck drivers covered—received increases in basic scales. Almost two-thirds of the printers and 70 percent of the local transit workers benefited by between 15 and 30 percent. For the majority of those receiving increases in trucking and baking, advances were 10 to 25 percent. All industries recorded reductions in the straight-time workweek. Overtime payments of time and a half covered almost all the workers. Page 444.

Wage structure in cotton-textile, and woolen and worsted industries, spring of 1946

Cotton-mill workers were paid an average hourly wage of 75 cents in the spring of 1946; workers in yarn mills averaged 71 cents, in weaving mills 98 cents, and in integrated (combined spinning and weaving) mills—by far the largest group—76 cents. Straight-time hourly earnings in the Southeast (employing about 80 percent of the cotton-mill workers) averaged 74 cents, and in New England plants (which employed most of the remaining workers) 82 cents. Page 454.

Woolen and worsted plant workers averaged 94 cents an hour on a straight-time basis in April 1946; less than a sixth of the workers were paid under 75 cents while about a third received $1.00 or more. Reflecting variations in occupational structure, wages in the worsted branch generally exceeded those in woolen mills. Men, comprising nearly three-fifths of the work force, earned 99 cents as compared to 86 cents earned by women. Workers in New England, the major producing region, had higher rates than those in other regions. Page 461.

Developments in the consumers' cooperative movement in 1946

Among the outstanding events in the consumers' cooperative movement in 1946 were the holding of the cooperative congress, which ratified a structural reorganization, and the formation of national federations of housing, medical-care, and student cooperatives. The International Cooperative Congress, held at Zurich, authorized the establishment of an international association to carry on cooperative trade in petroleum products. These and other developments are discussed in the article on page 472.

Current statistics of labor interest in selected periods [1]

[Available in reprint form]

Item	Unit or base period	1947	1946			1939: Average for year
		January	December	November	January	
Employment and unemployment						
Civilian labor force (BC): Total	Thousands	57,790	58,430	58,970	53,320	[2] 54,230
Male	do	41,860	41,990	41,950	37,160	[2] 40,950
Female	do	15,930	16,440	17,020	16,160	[2] 13,280
Employed [3]	do	55,390	56,310	57,040	51,020	[2] 46,930
Male	do	39,910	40,300	40,430	35,390	[2] 35,600
Female	do	15,480	16,010	16,610	15,630	[2] 11,300
Nonagricultural	do	48,890	49,100	49,140	44,300	[2] 37,430
Agricultural	do	6,500	7,210	7,900	6,720	[2] 9,500
Unemployed	do	2,400	2,120	1,930	2,300	[2] 7,300
Male	do	1,950	1,690	1,520	1,770	[2] 5,350
Female	do	450	430	410	530	[2] 1,950
Civilian employment in nonagricultural establishments: Total. [3]	do	39,470	40,726	40,381	37,013	30,353
Manufacturing	do	15,048	15,026	14,959	13,236	10,078
Mining	do	827	819	828	810	845
Construction [4]	do	1,435	1,617	1,808	1,132	1,753
Transportation and public utilities	do	3,933	3,976	4,005	3,897	2,912
Trade	do	7,866	8,589	8,267	7,481	6,618
Finance, service, and miscellaneous	do	5,193	5,260	5,244	4,948	4,160
Federal, State, and local government, excluding Federal force-account construction.	do	5,168	5,439	5,270	5,473	3,988
Military personnel	do	1,987	2,204	2,441	7,048	367
Production-worker employment:						
Manufacturing	do	12,269	12,271	12,212	10,666	8,192
Bituminous-coal mining	do	3,361	326	334	338	371
Class I steam railroads, including salaried employees (ICC).	do	1,334	1,353	1,382	1,393	988
Hired farm workers (BAE)	do	1,525	2,060	2,503	1,320	[5] 1,626
Hours and earnings						
Average weekly earnings:						
Manufacturing		$46.94	$46.86	$45.78	$41.15	$23.86
Bituminous-coal mining			$69.56	$61.54	[6] $58.09	$23.88
Retail trade			$33.73	$33.04	[6] $30.54	$21.17
Building construction (private)		$59.97	$60.32	$57.65	$52.89	$30.39
Average weekly hours:						
Manufacturing	Hours	40.5	40.9	40.2	41.0	37.7
Bituminous-coal mining	do		46.7	41.7	[6] 45.7	27.1
Retail trade	do		40.2	39.6	[6] 40.3	43.0
Building construction (private)	do	37.6	38.4	37.2	37.7	32.6
Average hourly earnings:						
Manufacturing		$1.158	$1.145	$1.139	$1.004	$0.633
Bituminous-coal mining			$1.491	$1.477	[6] $1.281	$0.886
Retail trade			$0.919	$0.918	[6] $0.826	$0.536
Building contruction (private)		$1.594	$1.569	$1.549	$1.402	$0.933
Average straight-time hourly earnings in manufacturing, using—						
Current employment by industry			$1.104	$1.104	[6] $0.954	$0.622
Employment by industry as of January 1941.			$1.106	$1.106	[6] $0.957	$0.640
Quarterly farm wage rate, per day without board (BAE).		$4.83			$4.40	[5] $1.53
Industrial injuries and labor turn-over						
Industrial injuries in manufacturing per million man-hours worked.			14.9	16.0	[6] 17.0	15.4
Labor turn-over per 100 employees in manufacturing:						
Total separations		4.9	4.5	4.9	6.8	[5] 3.2
Quits		3.5	3.0	3.7	4.3	[5] 0.9
Lay-offs		0.9	1.0	0.7	1.8	[5] 2.2
Total accessions		6.0	4.3	5.7	8.5	[5] 4.1
Labor-management disputes						
Work stoppages beginning in month:						
Number		290	180	310	325	218
Number of workers involved	Thousands	100	95	450	1,400	98
All work stoppages during month:						
Number of man-days idle	do	1,250	3,065	4,750	19,750	1,484
Man-days idle as percent of available working time.		0.2	0.4	0.7	3.1	0.28

See footnotes at end of table.

Current statistics of labor interest in selected periods [1]—Continued

Item	Unit or base period	1947	1946			1939: Average for year
		January	December	November	January	
Prices						
Consumers' price index (moderate income families in large cities): All items	1935–39=100	153.1	153.3	152.2	129.9	99.4
Food	1935–39=100	183.8	185.9	187.7	141.0	95.2
Clothing	1935–39=100	178.3	176.5	171.0	149.7	100.5
Rent	1935–39=100	[7] 108.8	----------	[8] 108.8	[9] 108.4	104.3
Fuel, electricity, and ice	1935–39=100	117.3	115.5	114.4	110.8	99.0
Housefurnishings	1935–39=100	178.5	177.1	171.0	148.8	101.3
Miscellaneous	1935–39=100	136.6	136.1	132.5	125.4	100.7
Retail food price index (large cities): All foods.	1935–39=100	183.8	185.9	187.7	141.0	95.2
Cereals and bakery products	1935–39=100	143.4	141.7	140.6	109.4	94.5
Meats	1935–39=100	199.0	197.8	203.6	131.4	96.6
Dairy products	1935–39=100	190.1	200.9	198.5	136.4	95.9
Eggs	1935–39=100	181.7	201.1	201.6	172.4	91.0
Fruits and vegetables	1935–39=100	187.9	185.0	184.5	180.8	94.5
Beverages	1935–39=100	178.3	176.2	167.8	124.9	95.5
Fats and oils	1935–39=100	201.9	207.3	244.4	125.5	87.7
Sugar and sweets	1935–39=100	176.2	175.3	170.5	126.5	100.6
Wholesale price index: All commodities	1926=100	[10] 141.5	[10] 140.9	[10] 139.7	107.1	77.1
All commodities other than farm products.	1926=100	[10] 136.1	[10] 134.8	[10] 132.9	101.9	79.5
All commodities other than farm products and foods.	1926=100	[10] 127.6	[10] 124.7	[10] 120.7	100.8	81.3
Farm products	1926=100	165.0	168.1	169.8	129.9	65.3
Foods	1926=100	156.2	160.1	165.4	107.3	70.4
National income and expenditures						
National income payments (BFDC)	Millions	$14,422	$15,852	$14,202	$13,047	[5] $5,771
Consumer expenditures for goods and services (B. FDC).	do	----------	[11] $36,115	----------	[11] $30,056	[11] $16,651
Retail sales (BFDC)	do	$7,870	$10,282	$9,086	$6,695	[5] $2,860
Production						
Industrial production index, unadjusted (FR): Total.	1935–39=100	184	179	182	156	100
Manufactures	1935–39=100	192	188	191	160	109
Minerals	1935–39=100	139	131	135	134	106
Bituminous coal (BM)	Thousands of short tons.	58,860	42,320	37,390	54,075	32,905
Car loadings index, unadjusted (FR)	1935–39=100	138	131	141	123	101
Electric energy (FPC): Total	Millions of kw.-hr.	25,957	24,875	23,943	22,163	[12]
Utilities (production for public use)	do	21,636	20,847	19,949	18,403	[5] 10,388
Industrial establishments	do	4,321	4,028	3,994	3,760	[12]
Construction						
Construction expenditures	Millions	928	1,038	1,149	589	[5] 469
Value of urban building construction started.	do	261	226	268	320	[12]
New nonfarm family dwelling units		41,000	35,200	46,600	44,800	[5] 32,300

[1] Source: Bureau of Labor Statistics unless otherwise indicated. Abbreviations used: BC (Bureau of the Census); ICC (Interstate Commerce Commission); BAE (Bureau of Agricultural Economics); BFDC (Bureau of Foreign and Domestic Commerce); FR (Federal Reserve); BM (Bureau of Mines); FPC (Federal Power Commission). Most of the current figures are preliminary.

[2] 10-month average—March to December 1940—not comparable with later figures. Revisions are in process.

[3] Excludes employees on public emergency work, these being included in unemployed civilian labor force. Civilian employment in nonagricultural establishments differs from nonagricultural employment in civilian labor force mainly because of the inclusion in the latter of such groups as self-employed and domestic and casual workers.

[4] Includes workers employed by construction contractors and Federal force-account workers (nonmaintenance construction workers employed directly by the Federal Government). Other force-account and nonmaintenance construction employment is included under manufacturing and other groups.

[5] January.

[6] December 1945.

[7] Based on data from 5 cities.

[8] September.

[9] March.

[10] Includes current motor vehicle prices. See note on p. 511 of this issue.

[11] Fourth quarter.

[12] Not available.

MONTHLY LABOR REVIEW

MARCH 1947

Urban Wage-Rate Trends in Manufacturing Industries, October 1946[1]

THE TREND OF WAGE RATES in manufacturing industries continued upward throughout the calendar year 1946, as industry gradually adjusted to wage-increase patterns established through important wage negotiations during the first quarter of the year. By the end of 1946, however, postwar gains had been virtually offset by increases in the prices of consumer goods. New patterns of wage increase were forming in the last quarter of the year in some consumer-goods industries, and preparations were under way for reopening wage negotiations in the durable-goods industries. These changes are disclosed in the latest Bureau of Labor Statistics study on the trend of manufacturing wage rates in urban areas.[2]

Postwar Rate Increases to October

Manufacturing wage rates in urban areas advanced by an average of 5.7 percent between April and October 1946. Added to the 11.7-percent gain between VJ-day and April 1946—when the last survey of urban wage-rate trends was made—this rise brought the average postwar wage increase to 18.1 percent (about 17 cents), somewhat

[1] Prepared under the direction of Frances Jones Clerc and Eleanor K. Buschman of the Bureau's Wage Analysis Branch.

[2] The parallel series for selected nonmanufacturing industries was not included in the October 1946 survey. For a more detailed description of the Bureau's measure of urban wage trends and the findings of previous surveys, see Monthly Labor Review, October 1944 (p. 684), or Serial No. R. 1684; February 1945 (p. 379), or Bulletin No. 809; September 1945 (p. 519), or Bulletin No. 846; February 1946 (p. 289), or Bulletin No. 860; and November 1946 (p. 657), or Bulletin No. 891.

Urban wage-rate trends should not be confused with trends of factory earnings, published monthly by the Bureau (see p. 548 of this issue). The urban wage-rate series measures changes in basic wage rates resulting from general changes in pay scales and from individual wage-rate adjustments within occupational classifications. For incentive workers, they reflect changes in straight-time hourly earnings within occupational classifications. They exclude the effect of such factors as the shifting of employment among regions, industries, and occupations, and most of the changes in the composition of the labor force, as well as changes in payments for overtime and late-shift work, vacations and holidays, and other similar items. In contrast, the series dealing with trends of factory earnings, on the other hand, is based on gross earnings of all wage earners and reflects such factors as hours of work, premium pay for overtime and late-shift work, and shifting of employment among regions, industries, and occupations. The estimated straight-time average hourly earnings are computed by applying a correction factor to gross average earnings to eliminate the effect of overtime premiums but not of night-shift premiums or other factors affecting gross earnings.

TABLE 1.—*Comparative summary of changes in earnings and wage rates in manufacturing, January 1941–October 1946*

Period	Percent of change in specified period				
	Gross weekly earnings	Gross hourly earnings	Adjusted hourly earnings [1]	Urban wage rates	General wage changes
Total period (January 1941–October 1946)	+71.5	+65.4	+64.9	[2] +57.4	+36.0
Prestabilization period (January 1941–October 1942)	+46.0	+30.7	+21.5	[2] +17.0	+12.6
Stabilization period (October 1942–August 1945)	+7.3	+14.7	[3] +15.6	[2] +13.9	+3.6
October 1942–April 1943	+9.2	+5.7	+3.2	[2] +3.0	+1.1
April 1943–October 1943	+5.6	+4.7	+3.6	+3.8	+.5
October 1943–April 1944	+1.5	+2.5	+3.0	+1.9	+.5
April 1944–October 1944	+3.1	+1.8	+2.1	+2.2	+.4
October 1944–April 1945 (VE-day)	+.4	+1.3	+1.9	+1.6	+.5
April 1945–August 1945 (VJ-day)	−11.5	−1.9	[3] +.9	+.7	+.4
Postwar period (August 1945–October 1946)	+9.5	+10.3	[3] +17.4	+18.1	+16.5
August 1945–October 1945	−1.8	−3.8	[3] +1.0	+1.7	+1.5
October 1945–February 1946 (Executive Order No. 9697)	−1.0	+1.7	+4.2	+4.3	+4.1
February 1946–April 1946	+5.7	+5.6	+4.6	+5.3	+5.1
April 1946–October 1946	+6.5	+6.8	+6.6	+5.7	+4.9

[1] Hourly earnings excluding premium payments for overtime, and with industries weighted in proportion to their 1941 employment.
[2] Partially estimated.
[3] Data not available for August 1945; July 1945 data substituted.

short of the 18.5-cent increase granted in several leading negotiations of early 1946.[3]

Most of this increase (16.5 percent) was brought about through general wage changes affecting all or significant numbers of the rate classifications in the establishments surveyed. Other gains accrued from upward adjustments in the wages of individual workers or small occupational groups for various reasons, such as the displacement of women and other war workers by returned war veterans at higher rates of pay. A third factor that contributed to the rise of the wage-rate index in a few industries was an improvement in piece-rate or other types of incentive earnings caused by influences other than rate increases.[4] However, in some industries (particularly the reconverted war industries) the incentive earnings did not advance in the same proportion as the time rates, and exercised a depressing effect on the gains accruing from general wage changes. As a result, the postwar increase in rates for time workers in manufacturing was about 1 percent greater than the rise in the wages of all workers in these industries. The movement of manufacturing wage rates from January 1941 through October 1946 is shown in table 1, which affords a comparison between the index of urban wage rates and other Bureau of Labor Statistics wage series.

[3] Because postwar industry-area employment weights for current industry classifications are not yet available, the Bureau is still using October 1943 employment weights and industry classifications in constructing its index of urban wage rates. In the April 1946 study, the Bureau undertook to estimate the difference that the use of current weights would make in the index. The results of this study indicated that the use of current weights would reduce the change for manufacturing for the period April 1945 to April 1946 by less than 1 percent.

[4] For incentive workers, straight-time earnings of an occupational group in an establishment are substituted for occupational rates in constructing the urban wage-rate index.

Wage-Rate Rises After October

Rates are estimated to have advanced an additional 1 percent between October and the close of 1946,[5] during which time important wage negotiations in several of the consumer-goods industries resulted in additional wage-rate increases. Furthermore, contract negotiations involving wages (among other issues) were in progress at the year's end or were anticipated for early 1947.

Effect of Higher Prices on Wage Gains

With these latest gains, urban wage rates in manufacturing at the close of 1946 were 19.3 percent higher than the VJ-day level and 59 percent higher than January 1941 rates. For the same periods, increases in the prices of consumer goods[6] were 18.6 percent and 52.1 percent, respectively, which virtually nullified postwar wage-rate increases and reduced to a negligible amount the net gains accrued since January 1941.

TABLE 2.—*Percent of change in urban wage rates in manufacturing, by industry group, January 1941–October 1946* [1]

Industry group	Percent of change from—										
	Jan. 1941 to Oct. 1942	Oct. 1942 to Apr. 1943	April 1943 to Oct. 1943	Oct. 1943 to Apr. 1944	Apr. 1944 to Oct. 1944	Oct. 1944 to Apr. 1945	Apr. 1945 to Aug. 1945	Aug. 1945 to Oct. 1945	Oct. 1945 to Apr. 1946	Apr. 1946 to Oct. 1946	Jan. 1941 to Oct. 1946
All manufacturing industries	+17.0	+3.0	+3.8	+1.9	+2.2	+1.6	+0.7	+1.7	+9.8	+5.7	+57.4
Food and kindred products	+13.6	+3.6	+3.2	+1.1	+1.9	+1.4	+.9	+2.1	+7.8	+8.3	+52.6
Tobacco manufactures	+15.7	+2.8	+1.1	+3.1	+1.7	+3.7	−.2	+5.5	+7.4	+8.9	+61.0
Textile-mill products	+24.2	+2.1	+2.7	+2.7	+2.3	+1.1	+1.1	+3.9	+12.3	+10.6	+80.4
Apparel and allied products	+13.8	+5.6	−.2	+5.0	+7.6	+6.7	+1.5	+1.6	+11.0	+4.9	+73.7
Lumber and timber basic products	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Furniture and finished lumber products	+16.2	−3.0	+3.4	+1.8	+2.9	+1.0	+1.9	+3.7	+9.0	+12.7	+59.9
Paper and allied products	+13.6	+2.4	+5.2	+.2	+1.7	+.4	+1.3	+1.9	+11.6	+8.6	+56.5
Printing, publishing, and allied industries	+7.4	+1.9	+3.1	+1.6	+2.5	+2.1	+1.2	+2.3	+9.1	+7.5	+45.7
Chemicals and allied products	+15.9	+2.8	+2.4	+1.3	+1.2	+.8	+1.1	+3.9	+10.6	+6.9	+56.5
Products of petroleum and coal	+18.0	+1.0	−.3	(3)	+.3	+.1	(3)	+5.7	+12.0	+1.7	+43.6
Rubber products	+15.5	+2.8	+2.0	+2.5	+1.4	+2.0	0	+.6	+15.2	+.7	+49.5
Leather and leather products	+20.3	+3.2	+4.5	+4.0	+4.2	+4.2	+1.4	+1.7	+12.9	+8.9	+85.7
Stone, clay, and glass products	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Basic iron and steel	(2)	(2)	(2)	+.7	−.6	+.4	------	------	[4]+13.2	[5]+3	[6]+14.1
Shipbuilding	(2)	(2)	+.4	+.4	+.5	+.8	+.2	+.2	+10.0	+5.0	[7]+18.4
Metalworking (except basic iron and steel, and shipbuilding)	+16.2	+3.4	+5.4	+1.9	+2.0	+1.2	+.5	+1.5	+8.9	+4.7	+54.9

[1] Data for periods prior to April 1943 are estimated.
[2] Representation inadequate to show percent of change.
[3] Less than a tenth of 1 percent.
[4] April 1945 to April 1946.
[5] Estimated.
[6] October 1943 to October 1946.
[7] April 1943 to October 1946.

[5] Estimate based on the Bureau's monthly series of average weekly hours and average hourly earnings.
[6] As measured by the Bureau's index of consumers' prices. For an explanation of this index, see article on p. 498 of this issue.

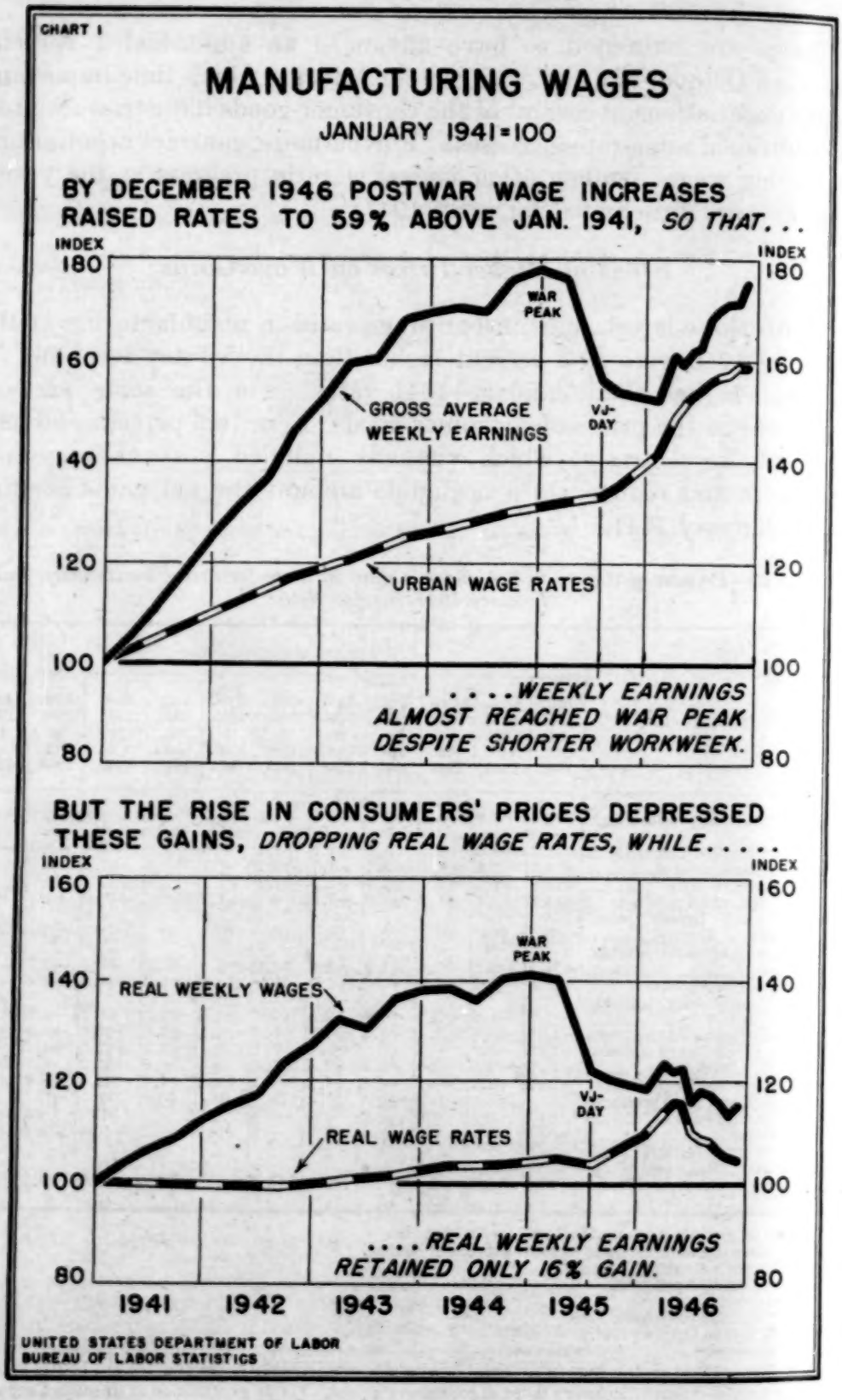
CHART 1
MANUFACTURING WAGES
JANUARY 1941=100
BY DECEMBER 1946 POSTWAR WAGE INCREASES RAISED RATES TO 59% ABOVE JAN. 1941, SO THAT...
INDEX
180
160
140
120
100
80
WAR PEAK
VJ-DAY
GROSS AVERAGE WEEKLY EARNINGS
URBAN WAGE RATES
....WEEKLY EARNINGS ALMOST REACHED WAR PEAK DESPITE SHORTER WORKWEEK.
BUT THE RISE IN CONSUMERS' PRICES DEPRESSED THESE GAINS, DROPPING REAL WAGE RATES, WHILE.....
INDEX
160
140
120
100
80
WAR PEAK
VJ-DAY
REAL WEEKLY WAGES
REAL WAGE RATES
....REAL WEEKLY EARNINGS RETAINED ONLY 16% GAIN.
1941
1942
1943
1944
1945
1946
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Real weekly earnings were about 5 percent below the VJ-day level in December and 18 percent lower than the wartime peak. They remained 15.6 percent above the January 1941 level, however. Comparison of wartime and postwar trends in wages paid and real wages [7] is made in chart 1.

Narrowing of Traditional Industry Wage Differentials

Postwar gains in wage rates were substantial but by no means uniform in all major industry groups. Between August 1945 and October 1946, the textile, furniture, and leather products industries had the largest increases of between 25 and 30 percent; tobacco, paper, chemicals, and petroleum had advanced wages between 20 and 25 percent; the printing, food, apparel, rubber, metal products, and shipbuilding industries showed gains of 15 to 20 percent; and basic iron and steel had the smallest net increase of 13.5 percent. (See table 2.) This trend in the direction of equalizing industry wage levels also operated during wartime, and was especially pronounced in the consumer industries which were under considerable pressure in obtaining labor, owing to the low rates of pay, and which were important to the war effort. Between January 1941 and the end of the war, the wage-rate indexes for leather products, textiles, and apparel rose between 40 and 50 percent; the index for all manufacturing advanced only 33 percent. Chart 2 provides comparison of war and postwar wage trends in selected industry groups.

Postwar rate increases were somewhat more uniform in money terms than on a percentage basis, however. Gains approximating an average of 20 to 25 cents an hour occurred in the petroleum products, furniture, printing and publishing, textile, chemical, and leather products groups. The paper, rubber, tobacco, food, apparel, and the metals groups had increases averaging between 15 and 20 cents an hour. The average effective increase was still below 18½ cents an hour in all of the latter groups of industries except paper, although the effective average increase had reached 18½ cents or more in certain industries within these industry groups. For example, available information indicates that within the metal products group of industries the rates for both the automobile industry and transportation equipment except automobiles approximated a 19-cent increase between August 1945 and October 1946; in iron and steel and their products, nonferrous metals, and machinery (both electrical and nonelectrical) the average rate increases were 15 to 18 cents. Some

[7] Real wages represent the purchasing power of actual wages. Real-wage indexes are computed by dividing actual-wage indexes by consumers' price indexes and multiplying the result by 100. The consumers' price index as used here does not include the estimated 5 points by which the index would be increased if account were taken of deterioration of quality and disappearance of low-quality merchandise. (See footnote 1 p. 498 of this issue.)

establishments have, of course, had higher-than-average increases, and others lower; many—especially among the smaller establishments—have granted no general wage increases whatever. As previously indicated, in some industries—particularly basic iron and steel—failure of incentive earnings to rise in proportion to the general wage changes prevented the latter from being reflected fully in the wage-rate indexes. On the other hand, for certain consumer-goods industries in which piecework is important, gains were larger in the urban wage-rate index than in the increases reported as general wage changes only.

Gains in Consumer-Goods Industries After October

Wage-rate advances between April and October 1946 represented to a large extent either the first increases given by individual companies after the end of the war or second increases of varying amounts necessary to bring company practice in line with action by competitive firms. In establishments which delayed such adjustments until late summer, companies frequently granted a few cents more than the "pattern" increases of the early spring to compensate for the summer rise in consumer prices. In some instances, entire industries raised their "patterns" of increase during this period. Notable among the latter are the cotton-textile industry which had generally advanced wages 8 cents during late 1945 and which widely adopted a second 8-cent increase in hourly rates in mid-1946; large segments of the full-fashioned hosiery industry which added 12½ cents to a previous 6-cent increase; and the furniture industry in which second increases of varying amounts raised the level of gain throughout the industry. As late as October 1946, however, the advances in wage rates that occurred were, in general, related to the spring pattern-setting increases.

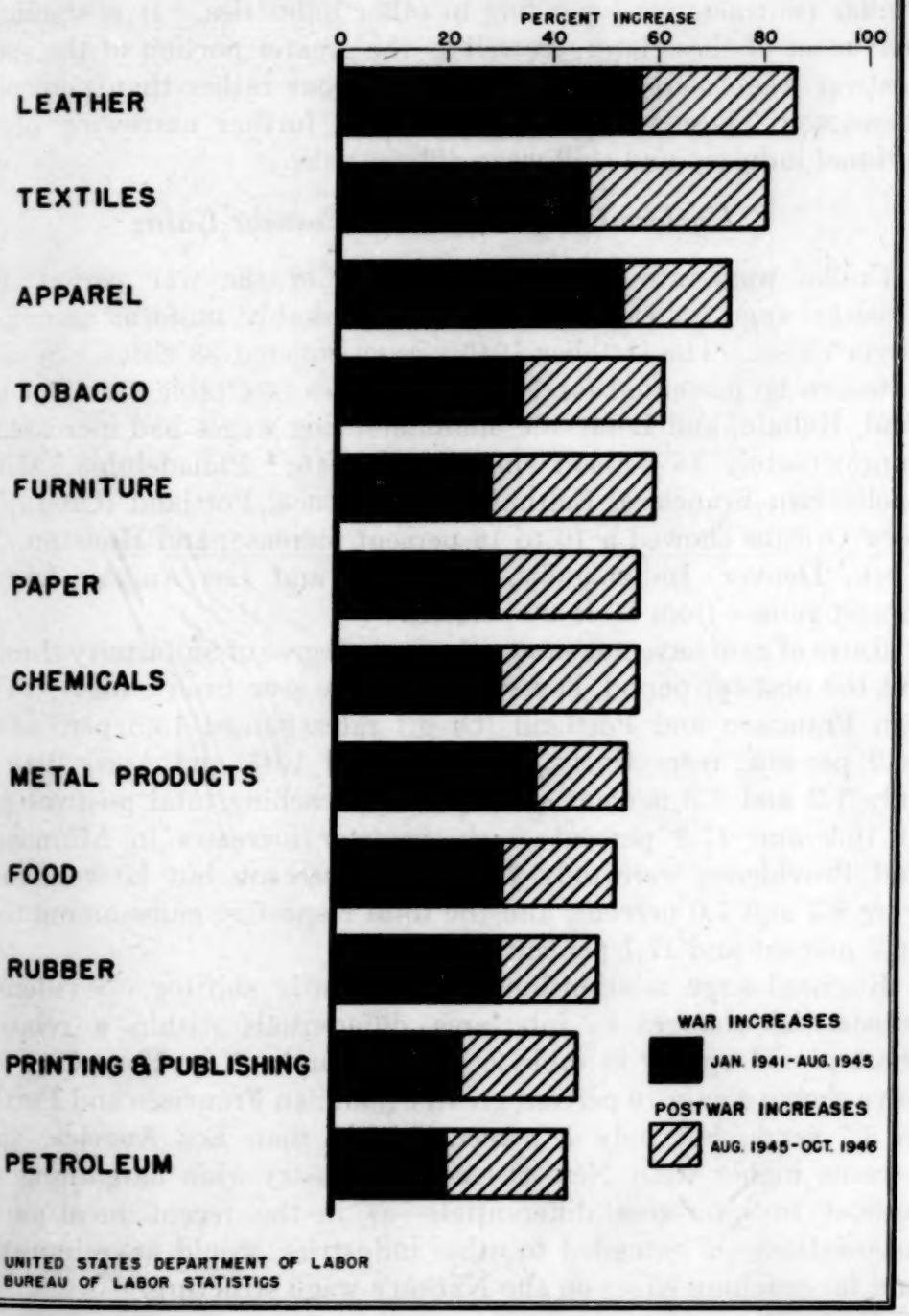
November marked the beginning of "second-round" postwar wage increases. As previously stated, manufacturing wage rates are estimated to have advanced an average of 1 percent between October 1946 and the close of the year. This advance resulted almost exclusively from new rate increases in the textile, apparel, food, leather products, and other consumer-goods industries. Large segments of the cotton-textile industry which had previously granted two 8-cent raises negotiated a third general increase of 10 cents an hour; the men's clothing industry announced a 12½-cent increase to be added to an earlier 15-cent raise; and the unionized shirt industry adopted a second 10-cent increase. Various branches of the women's apparel industries also announced general wage-rate increases. An arbitration award granted the Massachusetts shoe workers a 10-cent increase

CHART 2

WAR AND POSTWAR INCREASES IN WAGE RATES

SELECTED MANUFACTURING INDUSTRIES

JANUARY 1941 - OCTOBER 1946



UNITED STATES DEPARTMENT OF LABOR
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in addition to an earlier 15-percent raise. Negotiations of new contracts involving wage demands by this same group were pending at the year's end. The larger meat-packing firms, having raised wages 16 cents in February, completed negotiations in November and December 1946 that resulted in a general minimum wage increase of 7½ cents an hour, plus additional varying amounts for specific establishments in order to eliminate regional differentials. Demands for similar contracts were pending in other industries. It is significant that most of these later, as well as the greater portion of the earlier postwar wage increases, were cents-per-hour rather than percentage increases. These will contribute to the further narrowing of traditional industry and skill wage differentials.

Uniformity of Inter-Area Postwar Gains

Unlike wage-rate gains characteristic of the war period, total postwar wage increases have been remarkably uniform among the larger cities. The October 1946 survey covered 38 cities. Separate data can be presented for 16 of these cities (see table 3). In Cleveland, Buffalo, and Louisville, manufacturing wages had increased by approximately 15 percent since April 1945;[8] Philadelphia, Minneapolis, San Francisco, Baltimore, Providence, Portland (Oreg.), and New Orleans showed a 16 to 18 percent increase; and Houston, New York, Denver, Indianapolis, St. Louis, and Los Angeles had the largest gains—from 18 to 20 percent.

Rates of gain have not shown the same degree of uniformity throughout the postwar period, however, as can be seen from table 3. Thus, San Francisco and Portland (Oreg.) rates gained 15.5 percent and 16.2 percent, respectively, between April 1945 and April 1946 but only 1.2 and 1.5 percent subsequently, reaching total postwar gains of 16.9 and 17.8 percent; early postwar increases in Minneapolis and Providence were only 7.4 and 10 percent, but later advances were 8.2 and 7.0 percent, and the total respective gains amounted to 16.2 percent and 17.7 percent.

Regional wage relationships are constantly shifting. Evidence of substantial changes in inter-area differentials within a relatively short period appear in table 3. For example, New York City rates have shown a gain 16 percent greater than San Francisco and Portland in 3½ years, but only 5 percent higher than Los Angeles, and 7 percent higher than New Orleans. Industry-wide bargaining with respect to inter-area differentials—as in the recent meat-packing negotiations—if extended to other industries, would have immediate and far-reaching effect on the Nation's wage structure.

[8] The change from April 1945 to VJ-day has not been separated out at the area level. However, wage-rate changes during this period (as shown in table 1) were negligible in volume for manufacturing as a whole.

TABLE 3.—*Percent of change in urban wage rates in manufacturing, by selected area, April 1943–October 1946*

Urban area	Percent of change from—							
	Apr. 1943 to Oct. 1943	Oct. 1943 to Apr. 1944	Apr. 1944 to Oct. 1944	Oct. 1944 to Apr. 1945	Apr. 1945 to Oct. 1945	Oct. 1945 to Apr. 1946	Apr. 1946 to Oct. 1946	Apr. 1943 to Oct. 1946
Total, United States	+3.8	+1.9	+2.2	+1.6	+2.4	+12.4	+5.7	+30.4
Atlanta	+3.6	+1.4	+2.7	+2.9	+4.9	(1)	(1)	(1)
Baltimore	+1.2	+1.6	+1.6	+.5	(1)	+11.7	+4.8	+22.9
Birmingham	+1.9	+3.5	+1.2	+4.1	(1)	+11.7	(1)	(1)
Boston	+5.3	+1.6	+1.1	+3.7	+1.7	(1)	(1)	(1)
Buffalo	+9.3	+2.3	+.5	+1.8	(1)	+12.7	+2.0	+31.6
Chicago	+3.1	+1.8	+3.0	+2.1	+.3	(1)	(1)	(1)
Cleveland	+5.3	+1.2	+2.7	+1.0	(1)	+9.6	+5.0	+27.2
Dallas	+7.2	+1.9	+1.7	+2.4	+2.2	(1)	(1)	(1)
Denver	+4.1	+3.3	+1.8	−2.1	+2.3	+15.0	+4.2	+28.5
Detroit	+5.9	+.2	+.3	0	−.4	(1)	(1)	(1)
Houston	+1.6	+.2	+.8	+.1	(1)	+15.5	+2.1	+21.2
Indianapolis	+3.6	+.9	+1.4	+.6	(1)	+12.2	+6.1	+26.9
Kansas City	+1.4	+1.7	+1.7	+3.1	+.9	(1)	(1)	(1)
Los Angeles	+6.8	+1.5	+1.1	+1.2	+1.1	+12.7	+6.0	+32.5
Louisville	+1.4	+3.9	+3.3	+1.3	(1)	+10.0	+4.6	+26.9
Memphis	+3.8	+2.5	+2.0	+6.0	(1)	(1)	(1)	(1)
Milwaukee	+2.7	+.3	+3.1	+1.5	(1)	(1)	(1)	(1)
Minneapolis	+2.8	+.9	+1.2	+1.6	(1)	+7.4	+8.2	+23.8
Newark	+6.4	+1.8	+2.8	+.9	(1)	(1)	(1)	(1)
New Orleans	+7.3	+.5	+1.0	+1.0	(1)	+14.9	+2.5	+29.6
New York	+.5	+5.0	+6.4	+4.7	−.3	+12.1	+5.6	+39.0
Philadelphia	+2.1	+1.5	+2.3	+1.6	(1)	+12.7	+2.9	+25.0
Pittsburgh	+1.0	+1.8	+2.2	−.3	(1)	(1)	(1)	(1)
Portland (Oreg.)	+.5	−.1	+.8	+.2	(1)	+16.2	+1.5	+19.5
Providence	+2.6	+.7	+2.3	+.9	(1)	+10.0	+7.0	+25.4
St. Louis	+4.9	+5.4	+1.0	+.8	(1)	+10.6	+7.8	+34.4
San Francisco	+.9	+.4	+.8	0	(1)	+15.5	+1.2	+19.4
Seattle	+.9	+2.4	+.4	+.3	+.5	(1)	(1)	(1)

[1] Data not available.

Prices in the Fourth Quarter and Year 1946

Prices in General

PRICE ADVANCES DURING 1946 were greater than in any other year since World War I and in size were many times the moderate rises of 1943, 1944, and 1945. Increases were larger in primary markets (wholesale) than at retail—31.6 against 18.0 percent; and, in contrast to recent years, there were substantial advances for nonagricultural as well as agricultural commodities.

The rapid price rise in the third quarter of 1946 was repeated in the fourth quarter, with average primary market prices up 13.6 percent and retail prices of family essentials 5.1 percent higher. Average prices of farm products and foods advanced and prices of nonagricultural commodities rose even more than in the third quarter, as increases for metals and metal products, building materials, and chemicals far exceeded those of the previous quarter.

Annual percent changes in consumers' and wholesale prices from 1941 through 1946 are summarized in table 1.

TABLE 1.—*Annual percent change in consumers' and wholesale prices, 1941–46*

Year	Percent increase in—			
	Consumers' prices		Wholesale prices	
	All items	Food	All commodities	All commodities except farm products and foods
December 1940 to December 1941	+9.7	+16.2	+17.0	+11.4
December 1941 to December 1942	+9.0	+17.3	+7.9	+2.3
December 1942 to December 1943	+3.3	+3.3	+2.2	+1.8
December 1943 to December 1944	+2.1	+.2	+1.5	+1.3
December 1944 to December 1945	+2.3	+2.9	+2.3	+1.6
December 1945 to December 1946	+18.0	+31.5	+31.6	+24.1

Advances over the year 1946 were led by increases for agricultural commodities. Retail food prices rose 31.5 percent—nearly twice as much as in the first year of the war before price controls were instituted. Primary market prices of farm products and foods were up 27.8 percent and 47.4 percent, respectively. Substantial increases occurred, however, in other groups of commodities, most of which had been relatively stable under price control in recent years. Thus, prices of metals and metal products, only 13 percent higher at the end of 1945 than at the beginning of the war, rose 27.6 percent during 1946. Prices of building materials increased 32.1 percent in 1946, compared with 11 percent in the 4 years ending December 1945.

Demand for both consumers' and producers' goods continued to be heavy as national income remained at a high level. Although output had reached peacetime peaks, supply was still inadequate to fill pent-up demand in many fields. Production costs were increasing as prices of raw materials continued to advance and workers were granted higher wages to cover reduction of wartime earnings. With the end of hostilities, moreover, many Government controls were relaxed or removed, and pressure for abandonment of all price controls was strong as Congress considered renewal of the Price Control Act.

Developments in price control during 1946 were a major factor in the rapid advance of prices, particularly during the last half of the year. They may be summarized in four periods: (1) When controls were continued, but with many upward adjustments of ceilings (January to June); (2) when controls were suspended on all commodities (June 30 to July 25) and on important agricultural commodities (June 30 to September 1); (3) when controls were partially restored but with additional restrictions (July 26 to November 9); (4) when there were no controls, except for rice, sugar, syrup, and rents (November 10 to December 31).

Table 2 shows percent changes in consumers' prices and in primary market prices for significant price periods.

Price increases during the first half of 1946 largely reflected ceiling adjustments allowed by the Office of Price Administration on many products to cover higher production costs or to encourage increased production. Significantly, from the point of view of later developments, some of these were granted in basic industries, such as steel and coal, to cover higher wages under the Government's wage-price policy.

Following the temporary lapse of price controls on June 30, there were precipitate price increases, particularly for agricultural commodities. Retail prices of consumer goods and services rose 5.8 percent from mid-June to mid-July. Food prices jumped 13.8 percent—the largest monthly increase on record—but prices of other living essentials rose only slightly. General primary market prices increased 10.1 percent in July, more than in any month since the Bureau of Labor Statistics began compilation of its index in 1890. Largest advances occurred for foods, hides and leather, and farm products. Manufacturers of most industrial goods generally maintained former ceiling prices pending final decision on OPA controls.

The abrupt price rise was halted with restoration of controls on July 25, but many important agricultural commodities were exempted from control, and special provisions of the new act required additional exemptions and ceiling increases for many articles, especially for

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cotton and woolen goods. By mid-October most foods had been exempted from OPA control, and in early November President Truman issued his general decontrol directive. Following this order there were further sharp price advances, particularly for scarce industrial goods, such as fats and oils and nonferrous metals.

TABLE 2.—*Percent change in consumers' prices and in primary market prices, in specified periods* [1]

Commodity group	Percent change					
	In last quarter, Sept. to Dec. 1946	In last 6 months, June to Dec. 1946	In last year, Dec. 1945 to Dec. 1946	From end of war, Aug. 1945 to Dec. 1946	From wage base date, Jan. 1941 to Dec. 1946	From month before war in Europe, Aug. 1939 to Dec. 1946
Consumers' prices: All items	+5.1	+15.0	+18.0	+18.6	+52.1	+55.5
Food	+6.8	+27.7	+31.5	+31.9	+90.5	+98.8
Clothing	+6.4	+12.3	+18.1	+20.6	+74.4	+76.0
Rent					+3.1	+3.8
Fuel, electricity, and ice	+1.0	+4.5	+4.7	+3.7	+14.6	+18.5
Gas and electricity	+.3	−.1	−2.1	−3.4	−5.6	−7.1
Other fuels and ice	+1.3	+7.7	+9.7	+8.7	+33.0	+43.6
Housefurnishings	+6.9	+13.5	+19.4	+21.3	+76.7	+76.0
Miscellaneous	+4.8	+6.4	+9.1	+9.3	+33.7	+35.6
Primary market prices: All commodities [2]	+13.6	+24.8	+31.6	+33.3	+74.4	+87.9
Farm products	+8.9	+20.0	+27.8	+32.5	+134.8	+175.6
Foods	+21.4	+41.8	+47.4	+50.5	+117.2	+138.2
Hides and leather products	+24.8	+44.4	+48.6	+49.7	+72.6	+90.6
Textile products	+7.2	+23.4	+32.8	+35.2	+79.1	+98.7
Housefurnishings goods	+5.8	+8.9	+14.8	+15.0	+35.1	+40.4
Fuels and lighting materials	+1.9	+9.5	+13.3	+13.3	+33.3	+32.4
Metals and metal products [2]	+18.0	+20.1	+27.6	+28.7	+37.9	+44.5
Building materials	+17.9	+21.5	+32.1	+34.0	+58.4	+76.1
Chemicals and allied products	+27.7	+30.4	+30.8	+31.9	+59.9	+69.4
Miscellaneous commodities	+6.7	+10.6	+14.9	+14.9	+41.2	+48.6
All commodities except farm products and foods [2]	+11.1	+18.1	+24.1	+24.8	+47.9	+55.7

[1] In comparing retail and primary market price movements, the following differences between the consumers' price and primary market price indexes must be noted: The primary market index is based on prices of selected representative commodities of constant specifications. The consumers' price index is based on prices of selected goods and services purchased by moderate-income families in large cities, and reflects in part the effect of disappearance of lower-priced articles.

[2] A part of the September–December 1946 rise for these indexes reflected the introduction, in October 1946, of current prices of motor vehicles, which had been carried at April 1942 prices during the war. This introduction raised the index for all commodities 1.2 percent, for metals and metal products 10.1 percent, and for all commodities except farm products and foods 2.3 percent.

Although average prices had reached peak levels by the year's end and the trend was still upward, there were significant price declines in some fields as demand and supply became better balanced and consumer resistance to prevailing high prices began to be a factor of importance after the rush of Christmas-holiday buying was over. Thus, prices of agricultural commodities turned downward in December and prices of hides and skins dropped steadily from the peak levels of early November. In textiles, orders for which are placed with manufacturers 6 or more months in advance, buyers were demanding better quality for their money. Current market prices, therefore, were meeting opposing forces of rising costs and lack of demand at prevailing high levels.

Farm Products and Foods

Prices of farm products and foods at all levels of distribution advanced sharply in October and November 1946 with the removal of price and distribution controls from all foods except sugar, sirups, and rice. Record high prices were reached for many commodities as the Bureau's wholesale and retail food price indexes reached all-time peaks in November. Primary market prices of farm products, approximated the record level of January 1920. In December, however, increasing supplies, coupled with growing consumer resistance to high prices, reversed the trend and prices of farm products dropped 1.0 percent. Food prices declined 3.2 percent at wholesale and 1.0 percent at retail.

At the end of the year wholesale prices for foods were approximately 50 percent above the previous December and retail prices were more than 30 percent higher, most of the rise having occurred since June. All commodity groups except that of fresh fruits and vegetables shared in the year's price advance. Those with the largest price increases over the year included meats, fats and oils, dairy products, and dried fruits and vegetables, price stability for which had been maintained throughout the war period by means of subsidies and relatively low price ceilings. It has been estimated that approximately one-third of the rise in the cost of foods to retail consumers during the last half of 1946 may be attributed to the termination of subsidy payments.

Uncertainty and confusion persisted to the end of the year as the food trade adjusted to markets free from Government controls. Ceiling controls were removed from meats and animal fats by Presidential proclamation on October 15. Two days later coffee and most vegetable fats and oils were freed from regulation, followed in a week by all other foods except sugar, sirups, and rice. Rationing of sugar was continued, but almost all other food controls were terminated by the end of 1946.

Following decontrol in mid-October, meat prices climbed rapidly. From September to November livestock and poultry prices in primary markets increased by 31.3 percent and wholesale meat prices were up 54.5 percent, despite the record-breaking numbers of animals marketed and slaughtered. Prices quoted for good to choice beef steers at Chicago in November averaged $29.75 per hundred pounds, as compared with $17.25 a year earlier. Hogs, which had been selling at a flat ceiling of $14.85 early in 1946, were bringing well over $24 per hundred pounds at the Chicago market. By mid-December, however, retail meat prices had declined almost 3 percent from November, and wholesale livestock and meat prices dropped 1.4 and 7.2 percent, respectively, over the month.

Prices of butter, free of controls after June 30 but not assured continued price freedom until meats were formally decontrolled on October 15, rose 35 cents a pound at retail from June to October, reaching 96.3 cents per pound. Prices dropped rapidly in November and December, however.

Fruits and vegetables, as a group, advanced in price during the last quarter of 1946, as increases for canned and dried fruits and vegetables more than offset some seasonal declines among fresh fruits and vegetables. Reflecting large crops, prices of citrus fruits decreased and canned grapefruit juice dropped from an average of 15.3 cents per No. 2 can at retail in September to 13.2 cents in December. Scarcity of canned vegetables resulted in increased prices following decontrol.

Prices for grains in primary markets declined 4.5 percent over the fourth quarter of 1946, largely because of greater-than-seasonal price decreases in corn, which reflected heavy shipments from a record crop. Prices for wheat advanced in October and November as export demand continued strong and as cereals and bakery products were decontrolled; but in December, wheat prices weakened somewhat. Prices of cereals and bakery products advanced steadily during the quarter, rising 9.5 percent at wholesale and more than 3 percent at retail. Regular flour replaced "emergency" flour on grocers' shelves after the order increasing wheat extraction to 80 percent, in effect for 6 months, was terminated on September 1. With ample supplies of flour available, the order reducing bread weights by 10 percent was rescinded in October.

Fats and oils increased sharply following decontrol on October 17, but growing supplies and reaction from high prices brought substantial price declines for animal fats at the end of 1946.

Sugar and sweets, still under price control at the year's end, increased nearly 24 percent at retail during the last quarter of 1946—over 38 percent higher than a year earlier. Sugar ceilings were again increased in September to allow higher prices to be paid to Cuban producers under an agreement linking purchase prices to advances shown by the Bureau's consumers' price and retail food price indexes.

Spot quotations for middling cotton soared 60 percent—from 24 cents a pound in January 1946 to nearly 39 cents in the first week of October—the highest level in 26 years. In the last 3 weeks of October, however, liquidation of speculative holdings lowered prices of 15/16″ staple cotton nearly 9 cents a pound. Prices partially recovered to end the year at nearly 33 cents a pound. The prospect of consumer resistance to higher prices retarded the rally of cotton markets during November and December, despite continued dearth

of prewar standard cotton goods, expectations of increasing raw cotton exports, and the smallest crop since 1921.

In the first quarter of 1946 the Commodity Credit Corporation lowered its selling prices for domestic wool 3 to 6 percent in order to place domestic wools in a better competitive position in world markets; but in the last quarter the Corporation advanced prices in accordance with the Price Control Extension Act, to meet parity requirements.

Textiles and Apparel

Retail costs of apparel purchased by moderate income families continued to advance during 1946, marking a 3½-year period of steadily rising prices. Between December 1945 and December 1946 prices of medium and lower quality clothing rose 18 percent to a point more than 75 percent above the prewar level. Prices moved upward at the rate of approximately 1 percent a month until controls were temporarily suspended at the end of June. The rate of increase was stimulated by the provisions of the Price Control Extension Act of July 25, 1946, which stipulated that prices for products made from wool and cotton should reflect raw material and manufacturing costs plus a reasonable profit. Following the President's decontrol order early in November, clothing prices rose more than 3 percent in the first month to the highest point since 1920. The 1946 increase in prices for cotton clothing and shoes was nearly three times as great as that for woolen clothing.

Primary market prices for clothing advanced steadily over the year. Cost-plus-margin formulas contained in OPA price orders, as well as incentive price increases designed to encourage production of certain scarce lines, resulted in advances of 2 percent in the first quarter and 10 percent in the second in manufacturers' prices of clothing. After the reenactment of price control in a less stringent form late in July 1946, prices increased 2 percent. Following the decontrol order in the last quarter, prices rose 4 percent, reflecting the increased cost of fabrics, other materials, and labor which were passed on by the manufacturers.

Woolen and worsted goods prices remained stable through June. In the third quarter prices increased 3 to 7 percent under new ceilings established by OPA for piece goods of the same constructions and qualities made in June 1942.

Prices of cotton goods rose 10 percent in the first 6 months of 1946, under the Bankhead amendment to the Stabilization Extension Act of 1942. A further increase of more than 25 percent took place in spot market prices during the last 6 months of the year under the impetus of strong demand and limited supplies of wanted construc-

tions, notwithstanding the sharp October decline in the raw cotton market. Although prices on certain types of cotton goods for immediate delivery were as much as 20 to 25 percent above the last OPA ceilings, the output of many mills was sold through the first quarter of 1947, and some through the second quarter, at approximately ceiling prices.

Prices for rayon yarn and staple fiber remained unchanged during the first 10 months of 1946, but following the suspension of OPA controls in November, prices increased approximately 10 to 12 percent. This was the first general price increase for rayon in 5 years. Prices of nylon yarn remained unchanged during the year.

The production of women's rayon hosiery decreased gradually in 1946 as greater quantities of the more popular nylon hosiery became available. Production figures for the first 11 months of 1946 show that almost twice as many pairs of nylon as rayon were being shipped. At the wholesale level, prices of nylon hosiery remained unchanged until the end of controls, after which some manufacturers increased prices on the finer deniers.

In July the U. S. Commercial Company offered the first postwar imports of Japanese raw silk for sale at more than double the prewar price. Consumer resistance to high prices of silk products, particularly hosiery, made manufacturers reluctant to buy raw silk at prices acceptable to the Government. Although prices were lowered in subsequent sales, large inventories accumulated in warehouses.

Hides and Leather

Hides and skins soared 88 percent in the first 11 months of 1946. Over half of the advance occurred after decontrol of these commodities on October 30. This increase outstripped price rises for any other 11-month period during the preceding 33 years. Prices of cattle hides and skins practically doubled in the first weeks of November, but declined nearly 20 percent by the end of December as available supplies exceeded tanners' immediate needs. Goatskins doubled in price during July and August following cessation of import controls on raw skins, and advanced moderately in November after final decontrol of leather prices. Domestic tanners found it difficult to outbid goatskin purchasers in other countries.

Leather quotations mounted more than 70 percent during 1946. As in the case of raw stock, more than half of the rise developed after decontrol of leather prices at the end of October. Prices of leather did not show any tendency to weaken late in the year, as did raw material prices, owing to the increase of other tanning costs in the last quarter.

Shoe manufacturers were granted several adjustments in ceiling prices prior to decontrol on October 30, but market advances in leather and other costs during the last quarter caused the major portion of the 1946 increase of 30 percent in factory prices of leather footwear. Moderate-income families found that the cost of shoes had risen about 20 percent during the year, with the largest change in prices of men's shoes. Consumers continued to indicate a preference for well-made shoes, according to retailers reports, and low-priced lines became even scarcer.

Housing

Residential rents advanced slightly but steadily throughout 1946, the largest increase occurring during the temporary suspension of OPA in July. During the first 9 months of the year, rents in 34 cities rose 0.5 percent, the largest increase since Federal rent controls were instituted in 1942.

Housing shortages continued to be severe, with most large cities having fewer vacancies in 1946 than in 1945. War workers, who had migrated to other cities during the war, and veterans continued to return in large numbers to their homes during the early months of the year. In Scranton, Pa., rents increased 6 percent between December 15, 1945, and May 15, 1946, and Federal rent controls were instituted there for the first time on June 1, 1946. OPA continued to establish controls in new areas, particularly college towns, which became congested during the year. At the same time, it eliminated controls in some areas where housing shortages had eased and decontrolled rents on seasonal dwellings in resort areas.

Reports indicated that the sales prices of homes and the number of sales continued to increase during the first months of 1946 but were leveling off during the latter part of the year, particularly in Eastern cities. Despite shortages of essential building materials and labor, construction was begun on more than 400,000 private urban dwellings in 1946—three times as many as in 1945. Completions were limited, however, by shortages of materials.

The removal of price ceilings on building materials in November 1946 dealt a serious blow to the veterans' housing program, with its emphasis on low-priced dwellings. Housing Expediter Wilson Wyatt resigned in December, and a new national housing policy was announced by President Truman. The new program removed the $10,000 ceiling on sales price and the $80 a month rent ceiling on new housing; allowed nonveterans as well as veterans to build homes; and provided a progressively increased flow of building materials into nonresidential construction.

Pressure for decontrol or for an upward adjustment in rents grew. Organized landlord associations in a number of cities, particularly in the Far West and Southwest, were reported as holding apartments vacant in a demonstration against OPA rent controls. The National Association of Real Estate Boards requested a 15-percent increase in residential rents, and OPA's housing rent advisory committee favored such an increase. No official action, however, had been taken by the end of the year.

Housefurnishings

Retail costs of housefurnishings increased 6.9 percent during the fourth quarter of 1946, as consumers paid higher prices for textile housefurnishings and electrical appliances and continued to find lower-priced rugs, stoves, and case goods scarce. The increase over the year amounted to 13.5 percent, as compared with that of 3.7 percent during 1945.

Prices at the primary market level rose 1.7 percent during the last quarter of 1946 as manufacturers increased some prices and rounded others upward to "even figures." During the year prices advanced 14.8 percent, as against 0.3 percent during 1945. Most consumer durable goods, such as electrical appliances, stoves, and innerspring mattresses, again became available on the market, although not always for immediate delivery.

During the first half of 1946, prices of sheets advanced nearly 9 percent at the manufacturer's level and 12 percent in retail stores. Further increases of more than 25 percent and 29 percent, respectively, took place in the last 6 months of 1946, reflecting higher raw cotton costs. Towels also were considerably higher during the year. Cotton-blanket prices also moved up, although prices for woolen blankets were comparatively stable. The average increase in prices for blankets at the retail level was less than 9 percent in 1946. Prices of table oilcloth advanced nearly 28 percent in the first 6 months and almost 8 percent more between June and December.

Retail prices of wool and hard-surface floor coverings rose steadily during 1946 as industry-wide price increases granted to manufacturers to meet the higher cost of labor and materials were passed on to the consumer. In addition, increases averaging about 10 percent were put into effect by most manufacturers of wool floor covering immediately after price decontrol. Production still was concentrated on the more expensive grades. During the year most manufacturers returned to the use of jute for rug backings. The production of hard-surface floor coverings was hampered throughout the year by the acute shortage of linseed oil—a situation which improved immediately after the decontrol of prices. Announcement by the two largest

manufacturers indicates that the "war born" asphalt-saturated felt back covering will replace, at least for the present, the prewar burlap article, especially in the lighter gauges.

The retail cost of wood household furniture and bedding showed both increases and decreases during 1946 as retailers canvassed various resources for merchandise and adjusted prices to established price lines following the decontrol order. Price rises continued to outrank declines, however, as retailers paid higher prices to manufacturers and consumers were forced to buy in higher price lines to obtain merchandise. Prices at the primary market level rose in the third quarter as a result of industry-wide increases and individual company adjustments granted to manufacturers of bedding equipment. Office furniture, as well as household furniture, advanced in price during the period with OPA approval.

Furniture production continued to increase, but most manufacturers confined output to a limited number of patterns, and, like floor covering manufacturers, distributed their products on an allotment basis. Dining-room and office furniture remained in short supply. Bedroom furniture was more plentiful, but closely priced casegoods from the better known manufacturers still was not sufficient. On the other hand, metal and juvenile furniture, upholstered furniture, sofa beds, mattresses, and bedsprings were available in quantity, and some retailers again offered choice in the type and color of coverings on upholstered furniture. Sales, discontinued during the war period because of shortages, were resumed as merchants sought to clear their inventories of substandard merchandise.

By the middle of 1946, production of vacuum cleaners and washing machines had passed prewar volume. Retail and primary market prices of appliances and stoves rose as OPA permitted manufacturers to increase prices and retailers to pass on increased costs to the consumers. Further price increases were put into effect by both manufacturers and retailers following the decontrol order.

Shortages of steel and enamel sheeting, copper and other wire covering, small motors, and electrical parts, as well as labor difficulties, hampered output of durables. Refrigerators, washing machines, sewing machines, and stoves continued in short supply. On the other hand, table model radios, vacuum cleaners, electric irons, and toasters were plentiful. Price reductions on small table model radios were put into effect by at least one large manufacturer, and lesser known makes of radios were sold at clearance prices. Installment credit buying increased rapidly, influenced in part by the easing of Government regulations, lower incomes in some sections, and the desire by some consumers not to disturb their cash savings.

Miscellaneous Goods and Services

Retail costs of miscellaneous goods and services advanced 4.8 percent, on the average, during the fourth quarter of 1946. The rise during the year was 6.4 percent, against 1.4 percent in 1945. During 1946 there were scattered increases in costs of motion-picture admissions, newspapers, and public transportation. The cost of beauty-shop and barber services continued their upward trend as shops reported increased cost of operation. Hospital rates were generally higher as overhead costs rose.

Prices of laundry and dry-cleaning services registered small but continued increases throughout the year as OPA allowed individual price adjustments, and rose sharply in the fourth quarter of 1946 following decontrol. During the second quarter the cost of automobile public liability insurance increased as companies returned to their prewar rates after gasoline rationing was discontinued.

Prices of tobacco products increased during the year at both the retail and primary market levels. Price increases in the second quarter reflected OPA adjustments, and other increases followed the exemption of tobacco products from the Price Control Extension Act of 1946. By the middle of the year, the supply of cigarettes became ample and retailers resumed sales in multiple units. The old-time "five-cent cigar" also was available in larger quantity but at a price of about 9 cents.

Fuel and Utilities

Average primary market prices for fuel and lighting materials rose 13.3 percent during 1946 to the highest level since February 1927, with increases of 10.0 percent for anthracite, 11.1 percent for bituminous coal, 9.3 percent for coke, and 23.1 percent for petroleum products. The 12-month increase was greater than the entire advance during the war years 1942–45. Retail prices also moved up sharply during 1946. In general, the advance was caused by increased ceilings for coal to cover higher wages and decontrol of petroleum prices in August. Rates for gas and electricity continued to decline.

Coal prices were generally stable until mid-1946, when ceiling increases averaging 40 cents per ton for bituminous coal and 91 cents per ton for anthracite were allowed producers and passed on to consumers. These adjustments were permitted to cover higher wages granted miners following the work stoppage in the spring of the year, which ended in Government operation of the soft-coal mines under the Krug-Lewis agreement of May 29. Further advances in July reflected the temporary freight-rate increases of 6 to 8 cents per ton approved by the Interstate Commerce Commission July 1, 1946. A

compensatory adjustment of $1.35 per ton also was granted producers of coke. In November the subsidy previously paid by the Government to coal users to cover their increased wartime transportation costs was discontinued. No further important movements in coal prices occurred throughout the rest of the year.

A second general strike in soft-coal mines occurred in November, when the United Mine Workers of America failed in their attempt to reopen the Krug-Lewis agreement. It ended after substantial fines had been imposed on the union and its president by the Federal District Court of the District of Columbia, and the case was appealed to the Supreme Court. Meanwhile miners returned to the pits under the original terms of the agreement, which expires March 31, 1947. As a result of strikes during the year bituminous-coal production was cut about 8½ percent below that of 1945, but by the year's end output of soft coal was at a rate of over 12 million tons per week and stocks were beginning to accumulate again.

Prices of petroleum products, which had declined slightly during the first quarter of 1946 because of heavy inventories of gasoline, rose slightly by June and July as demand for gasoline exceeded expectations. Production of crude oil during the year was at record levels and, according to the Bureau of Mines, total supplies of petroleum products in 1946 materially exceeded requirements. With specific exemption of petroleum and its products from price control under the Price Control Extension Act in August, crude oil prices rose on the average, 25 to 35 cents per barrel, causing higher prices for kerosene, fuel oil, and gasoline as well. As prices advanced, RFC subsidies to stripper-well producers were withdrawn.

Continuing the previous trend, realized prices in 1946 were generally lower than in the previous year for electricity and gas, and customers received lower billings as a result of favorable earnings for utilities, owing in part to the continued increase in domestic and commercial consumption.

During the fourth quarter of 1946, prices for fuel and lighting materials were more stable than those of most other groups, reflecting competition between different fuels. Mild weather slowed up demand for heating fuels in October and November, but in December demand for all fuels was brisk and prices as a group rose 1.7 percent over November. Average prices of fuel and lighting materials advanced 32.5 per cent in primary markets since the outbreak of war in Europe in 1939 and 13.4 percent since the cessation of hostilities in August 1945. In a contrary trend, however, domestic rates for gas and electricity moved downward throughout the period and in December 1946 were 7.1 percent below prewar levels.

Building Materials

Wholesale prices of building materials rose 32.1 percent during 1946, more than half of the increase occurring in November and December, after price decontrol. Not since 1920 had prices for these commodities advanced so rapidly or reached so high a level. Prices of building materials as a group, at the end of December, were 75 percent above the immediate prewar level. This was only 6 percent below the all-time peak of April 1920. During the last quarter of 1946 prices of brick and tile and lumber surpassed the peaks reached in 1920. Lumber prices rose 44.0 percent in 1946; miscellaneous building materials (including glass, roofing, millwork, etc.), 24.5 percent; paint and paint materials, 44.2 percent; plumbing and heating, 20.9 percent; structural steel, 11.9 percent; brick and tile, 11.4 percent; and cement advanced 6.4 percent. About mid-1946 a system of premium payments was instituted to increase production and arrest advancing prices of important building materials. These payments covered hardwood flooring, brick, softwood plywood, gypsum paper liner, convector radiation, cast iron soil pipe and nails.

Quoted mill prices for lumber at the close of 1946 were the highest on record, exceeding the World War I peak by about 15 percent. At the end of the year the lumber market was still unsettled, with prices for some grades of southern pine varying as much as $35 per thousand board feet. Lumber prices in late 1946 failed to show the normal weakness usually expected in the season of decreased building activity; partly because dealers were replenishing stocks. Lumber production in 1946 was higher than predicted and stabilized prices were anticipated by midsummer, but the supply was expected to be tight for at least another year. Hardwood flooring was still critically short, although production was increasing rapidly.

Price increases during the last quarter of 1946 were most pronounced for paint and paint materials. Prepared paint rose 28 percent with OPA approval—its first advance since 1941; paint materials climbed 38 percent from September to December. Prices of raw materials soared to new highs. Most notable price increases after decontrol were for linseed oil (90 percent); ethyl acetate (63 percent); turpentine (43 percent); lead pigments (35 to 60 percent); litharge (36 percent); and barytes and chrome yellow (25 percent). All these, except turpentine and litharge, reached record prices. Most paint materials, except lampblack and barytes, continued in short supply.

Wholesale prices of brick and tile rose about 2 percent during the fourth quarter of 1946 and 10 percent during the year. Production of all clay products during the latter part of the year was reported at prewar levels, but only brick showed an increase in stocks, accord-

ing to Department of Commerce reports. The output of brick and tile during 1946 was about double that of 1945, and was expected shortly to fill or exceed all needs.

Manufacturers' prices for cement made only a fractional advance during the last quarter of the year, despite heavy demand both from regular users and for use instead of scarcer materials. Production in 1946 was the highest since 1942, but stocks dropped rapidly in the last half of the year, reaching the lowest level in many years in October.

Prices for plumbing and heating equipment ended the year 20 percent above the level of January 1946. Prices remained steady from June through November, but pent-up demand, shortages, and higher operating costs resulted in a price jump of 7 percent in December. Owing largely to shortages of iron and steel scrap and basic raw materials, supplies remained inadequate and stocks low.

Other building materials also moved up in price. Insulation board prices rose approximately 7 percent following decontrol in November. Stocks were low and demand was not expected to equal supply before the middle of 1947. Millwork rose about 30 percent in 1946, as production remained insufficient for the increasing demands. Wholesale prices for window glass advanced about 32 percent during the year. Flat glass was much in demand. New trends in architecture requiring glass for larger spaces and for insulated windows have increased requirements. Sufficient production of flat glass for a normal quantity of building, but not for a boom year, was predicted for 1947.

Other scarce materials showing significant price increases over the year were nails, which rose 30 percent; cast iron soil pipe, 17 percent; and asphalt roofing, which advanced 15 percent.

Metals and Machinery

Prices of metals and metal products rose about 8 percent during the last quarter of 1946, as a result of OPA adjustments early in the quarter followed by general price decontrol in November. The largest increases occurred in antimony, lead, and some iron and steel products.

These recent advances brought the total increase during 1946 to 27.6 percent, with prices at the highest point since late 1920. Higher quotations for motor vehicles and nonferrous metals were primarily responsible for the advance since the end of World War II.

Prices of all of the principal nonferrous metals except aluminum increased during the year. In December 1946 prices of these metals as a group averaged 50.7 percent above December 1945—the highest point since January 1920. Immediately following decontrol, tin rose

from 52 cents to 70 cents a pound as RFC, sole importer of this metal, adopted the selling price set by detinners as the Government's price. Two increases brought the price of antimony to 28½ cents per pound at Laredo, Tex.—almost 5 cents above the previous peak in January 1926. The 1946 increases of 2¼ cents a pound for primary zinc were the first price movements for this commodity since October 1941 except for a temporary advance in July 1946 during suspension of OPA. The price of copper was increased to 19½ cents a pound, 7½ cents above the former OPA ceiling which had been in effect from September 1940 until early June 1946. An adjustment in ceilings in June 1946, followed by three price increases in the last quarter of the year, raised the price of lead to 12.55 cents per pound at New York, compared with the previous peak of 11.50 cents in June 1917. This brought an end to Government subsidies on lead, as the market was above the bonus level set under the premium price plan.

In late November 1946, contract prices for nickel were raised 3½ cents per pound to 35 cents, the first price advance since 1929.

In July, the Treasury buying-price of silver was raised to 90½ cents per ounce by Congress. The open market price of commercial silver at New York rose to 90⅛ cents, where it remained until December except for a temporary decline in October. Heavy offerings of foreign silver and lack of consuming demand after the holiday trade dropped prices to 83¾ cents at the end of December.

After repeated requests from the steel industry, OPA on March 1, 1946, granted ceiling increases on steel products averaging $5 per ton, retroactive to February 15. This was the first general increase in steel prices since 1939. The industry regarded the adjustments as inadequate and continued to press OPA for further relief. Following the end of OPA controls, price increases in base prices and extras were announced for most of the major products.

Except for iron ore, the raw materials used in steel production remained in short supply throughout 1946. In an effort to increase pig iron output and also to offset higher production costs, OPA granted two industry-wide increases in ceiling prices of pig iron during the year. After decontrol in November, producers in all areas advanced quotations an additional $2 per gross ton. Prices on most grades of ferrous scrap remained unchanged during suspension of OPA controls in July because mills refused to pay higher prices. However, immediately following decontrol in November, prices advanced $5 and by the end of 1946 were up $12.50 over former ceilings, but buyer resistance reportedly was developing at the end of the year.

Supplies of nonferrous scrap continued inadequate throughout 1946. There was little movement of scrap, and trade reports indicated that dealers were withholding material from the market in the

hope of a ceiling price adjustment. In November, after decontrol, quotations on all grades were advanced.

By October, production of motor vehicles reached prewar rates, with prices averaging 27 percent above April 1942, when civilian production was discontinued. Most of the advance came between November 1945, when the first ceiling prices were announced, and June 1946, when OPA authorized increases to reflect higher labor and material costs. Further price rises for both passenger cars and trucks were announced by producers in the last quarter of 1946 following the termination of controls. These advances brought the total increases for the year to about 34 percent.

Prices of machinery began an upward movement in the second quarter—the first in almost 4 years. Most of the increases occurred before the end of OPA control and were granted to compensate producers for higher labor and material costs. During the year farm machinery rose 19.7 percent; construction machinery, general and auxiliary machinery, electrical machinery, and machine tools advanced variously 12 to 15 percent.

Chemicals and Allied Products

A price rise of 27.7 percent in the final quarter of 1946 raised the index for chemicals and allied products to its highest point since 1926 and 30.8 percent above the December 1945 level. The tendency to increase prices in line with replacement costs under heavy demand manifested itself again as in July, when OPA controls were suspended. During the last quarter of 1946, prices for oils and fats rose 96.5 percent; drugs and pharmaceuticals, 64.3 percent; and prices for chemicals increased 13.4 percent. Prices for fertilizer materials advanced 5.4 percent, and those for mixed fertilizers rose 4.0 percent. For each of these subgroups, the increases were sharper than for any other 3-month period since 1926.

Following decontrol, prices for inedible fats and oils rose sharply (82.7 percent) from October to December—more than in the period immediately following the United States entry into World War II. Prices for inedible tallow and copra doubled; those for coconut oil tripled. Quotations for soybean and castor oil advanced 44 and 49 percent, respectively.

Prices for drugs and pharmaceuticals in December 1946 reached an all-time peak following the record increase of 37 percent in November. Shortages of fats and oils affected prices of the byproduct glycerin, prices for which more than tripled. Other raw materials for medicinal chemicals and drugs also advanced sharply. Quotations for opium rose 64 percent; for camphor, crude iodine, and potassium iodide, 17 to 20 percent. Prices for acetylsalicylic acid were increased 12.5

percent in December—the first advance since July 1939. As a result of higher production costs, prices for ethyl alcohol and caffeine alkaloid rose 4.5 and 33.9 percent, respectively. Higher prices for raw materials caused advances for the medicinal grade of castor oil and for bismuth salts. Prices for acetanilide increased by 7 cents to 40 cents per pound, and for sorbitol, by 0.75 cents to 21 cents per pound. On the other hand, production economics and competition lowered price of streptomycin to $3.84 per gram, compared with the previous price of $6.40 per gram, and for penicillin to the record low of 38 cents per 100,000 units.

With the removal of price controls, prices of many basic chemicals also were readjusted in line with higher production costs. Among these were alkalis, solvents such as butyl and ethyl alcohol, acetone, carbon tetrachloride, sodium and potash salts, some of the organic acids, and a number of coal-tar chemicals. Some of these increases were the first since 1939. For example, ceiling prices for caustic soda, chlorine, and soda ash, which had remained unchanged since August 1939, were increased by 5 percent, effective September 13, 1946, in order to lift producer earnings to the 1936–39 base level. Additional increases of 8.7 percent for caustic soda and 14.3 percent for soda ash and chlorine became effective immediately after President Truman's decontrol directive. Price increases for raw materials caused price advances for derived products. Thus, the higher prices for fats and oils caused oleic- and stearic-acid prices to advance sharply, whereas an increase of 27.3 percent in prices for crude naphthalene was followed by an advance of 11.5 percent in phthalic anhydride quotations. Shortages and higher production costs also were responsible for advances of 13.7 and 25.7 percent, respectively, for the insecticidal materials arsenic and copper sulphate during the fourth quarter.

With fertilizer sales in 1946 attaining an all-time high, prices of fertilizer materials rose in response to higher production costs. Ceiling prices for phosphate rock and superphosphate, as well as for the nitrogenous materials sodium nitrate and ammonium sulphate were advanced by OPA about midyear. In December 1946, quotations for calcium cyanamide rose 14.7 percent. Prices for the organic materials were largely nominal at higher levels throughout the year. Despite shortages, potash prices and discounts remained unchanged at prewar levels, but because of delays in filling allocations the period of maximum seasonal discounts was prolonged. Higher raw material prices and increased labor and freight costs were responsible for an additional increase of 5.4 percent for fertilizer materials during the fourth quarter of the year.

Paper and Pulp

Paper shortages persisted throughout 1946 despite the fact that production of paper and paperboard reached 19 million tons—an all-time record. Demands, particularly for printing papers, were substantially in excess of supplies, and the industry began a vast expansion program. Shortages of raw material constantly handicapped the industry. To stimulate larger domestic output and imports of wood pulp and to cover increased operation costs, paper and pulp prices were raised both during control and decontrol periods. In 1946, prices advanced an average of 27.0 percent for pulp, 28.8 percent for paperboard, and 23.0 percent for paper. Advances were relatively sharp during the last quarter.

Decontrol of pulp prices came too late to stimulate the flow of Scandinavian pulp to this country in 1946, and price confusion following decontrol hindered commercial operations. After some hesitation, pulp prices became stabilized at levels somewhat above former ceilings. Thus, bleached sulphite pulp sold ex-dock per ton, as follows: Swedish pulp at $120, Finnish pulp at $165, Canadian pulp at $115, and domestic product at $105 to $110 (the last ceiling price—$100.50, delivered). Pulp shortages caused prices of waste paper (a direct substitute for pulp) also to rise rapidly after decontrol. Price ranges became characteristic of this market. For example, one trade paper reported that "hard white shavings and envelope cuttings (ceiling price of $57.50 per ton) have sold since decontrol all the way from $110 to $150 per ton, and we don't believe that even that range covers all the transactions by any means."

During the last quarter of 1946, prices for paper and paperboard also advanced sharply. Newsprint advanced to a port price of $84 per ton—13.5 percent over the previous OPA ceilings. Prices for book paper rose 8.8 percent, wrapping paper 13.2 percent, and tissue paper 8.9 percent.

Throughout 1946 there was a general shift in paper production from articles needed in volume during the war back to usual civilian goods. This trend was encouraged by selective OPA ceiling adjustments, and continued after decontrol.

Rubber and Rubber Products

Prices of rubber and rubber products remained relatively stable during 1946, as supplies improved. Foreign prices of crude rubber advanced in midyear, but RFC selling prices were continued unchanged. Increased production costs, principally those for labor and textiles, caused prices of tires, rubber footwear, and mechanical rubber

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products to rise, but these increases were moderate and occurred under OPA regulations. The rubber-goods-producing industry consumed more rubber in 1946 than at any time in its history—about 1 million tons both of synthetic and natural rubber, compared with 648,500 tons in 1940 (the previous peacetime record). With increasing supplies of natural rubber, Rubber Order R–1 was amended, effective November 15, to permit the use of this war-scarce material in 36 additional types of products. The Combined Rubber Committee announced on October 10 that international allocation control would not be continued beyond 1946. Domestic controls, however, were maintained.

Prices of scrap rubber remained below ceilings and were principally nominal, as demand for synthetic and mixed lots remained poor throughout the year. Reclaimers' inventories of rubber scrap were relatively large, and scrap dealers concentrated on those materials which brought larger profits or looked to the Far East and South America for exports. At the year's end, prices for mixed tires were selling at 29.5 percent above the August 1939 average—an increase of 4.9 percent over the January 1946 price—and mixed tubes at 113.3 percent above August 1939, or 2.2 percent more than in January 1946.

Collective Bargaining With Associations and Groups of Employers [1]

Most of the examples of industry-wide bargaining in the United States are the product of generations of experience, and as a rule the employer-union relations in these industries have been remarkably stable and peaceful. In the pressed or blown glassware industry, one of the branches of glass and glassware having national bargaining, no major strike throughout the industry has occurred since collective bargaining began with an employers' association in 1888. Similar conditions have prevailed in the pottery industry since 1922. The 1946 contract between the National Automatic Sprinkler and Fire Control Association and the United Association of Journeymen Plumbers and Steamfitters (AFL) is a revision of the original agreement of 1915; and the 1946 agreement between the Anthracite Coal Operators and the United Mine Workers of America (AFL) is a compilation of resolutions, revisions, rulings, and decisions dating back to 1903. Bargaining on an industry basis exists in the elevator installation and repair, installation of automatic sprinklers, pottery and related products, stove making, and wall-paper industries, and in coal mining.

Agreements covering all the employers in an industry within a geographic region are somewhat more numerous than those having application throughout an entire industry. Even more numerous are the instances in which associations or groups of employers are dealt with on a city-wide or metropolitan area basis. In this study, the existing extent and the areas of bargaining with associations and groups of employers are described. The most significant extension of this form of bargaining in recent years occurred during World War II in the shipbuilding industry. The Metal Trades Department of the American Federation of Labor negotiated a master agreement during 1941 with Pacific Coast shipyards organized by unions affiliated with the AFL. Prior to this time, joint agreements had been signed by these unions on the West Coast with employers in a single day. In other industries, since 1939, the practice only widened in those that had used this method of dealing for many years. The number of workers covered by these agreements increased somewhat as more of the Nation's industry became organized and was brought under agreement.

[1] Prepared by Roy M. Patterson and the staff of the Collective Bargaining Division of the Bureau's Industrial Relations Branch, under the general supervision of Harold S. Roberts, Chief. Special credit is also due for the contributions made by Abraham Weiss, Jesse Carpenter, and Philomena Marquardt.

However, the relative proportion covered in most industries did not change greatly.

Few of the examples of collective bargaining on an industry, geographic, or city basis occurred in the mass-production industries, although a single agreement in the automobile industry, for instance, may cover many more employees than an association agreement covering every employer in an industry or trade within the same city. In mass-production industries, trends are developing toward standardized conditions in large segments of industries through corporation-wide collective bargaining. The efforts of unions are directed first toward bringing all the plants of a given large corporation, regardless of geographic location, within the scope of a single agreement. An example is the corporation-wide bargaining between the Ford Motor Co. and the United Automobile, Aircraft and Agricultural Implement Workers of America (CIO). Notwithstanding the great number of workers affected, corporation-wide bargaining differs widely from multi-employer collective bargaining which is the subject of the present study.

Early in 1947, more than 4 million workers were covered by agreements negotiated between trade-unions and associations and groups of employers. These are about equally divided between manufacturing and nonmanufacturing industries. Approximately a fourth of all workers covered by union agreements in manufacturing and a third of such workers in nonmanufacturing are working under agreements negotiated with groups or associations of employers. The agreements were negotiated by one or more unions (1) with a formal or informal association of employers or (2) with informal multi-employer groups. In presenting the information on agreements, no attempt was made to distinguish between agreements with associations and with other multi-employer groups. Identical agreements signed by separate employers with the same union were included, if there appeared to have been negotiations with a group or committee of employers.

Worker Coverage of Group Bargaining

In table 1, the extent of association and employer-group bargaining is shown, based upon the percent of total workers under agreement in the respective industries.

TABLE 1.—*Percent of all workers under agreement who are covered by agreements with associations and groups of employers, by industry*

80–100 percent	60–79 percent	40–59 percent	20–39 percent
Clothing, men's	Baking	Building service and maintenance	Beverages, nonalcoholic
Clothing, women's	Book and job printing and publishing	Leather products, other	Hosiery
Coal mining	Canning and preserving foods	Newspaper and periodical printing and publishing	Hotels and restaurants
Laundry and cleaning and dyeing	Construction		Jewelry and silverware
Longshoring	Dyeing and finishing textiles		Lumber
Maritime	Glass and glassware		Shoes, cut stock and findings
Shipbuilding and boatbuilding [1]	Malt liquors		Trade
	Pottery and related products		
	Trucking and warehousing.		

0–19 percent			
Agricultural machinery and tractors [2]	Confectionery products	Meat packing	Railroad equipment [2]
Aircraft and parts [2]	Crude petroleum and natural gas [2]	Metal mining	Rayon and allied products [2]
Automobiles and parts [2]	Dairy products	Motorcycles, bicycles, and parts [2]	Rubber products [2]
Bus and streetcar, local [2]	Electrical machinery, equipment and appliances	Newspaper offices	Silk and rayon textiles
Bus lines, intercity [2]	Flour and other grain products	Nonferrous metals and products, except jewelry and silverware	Steel, basic [2]
Carpets and rugs, wool [2]	Furniture	Nonmetallic mining and quarrying	Steel products
Cement [2]	Knit goods, except hosiery	Paper and pulp	Stone and clay products, other
Chemicals, excluding rayon and allied products [2]	Leather (tanned, curried and finished)	Paper products	Sugar, beet and cane
Clerical and professional, excluding transportation, communication, theaters, and newspapers	Light and power [2]	Petroleum and coal products, except refining [2]	Telegraph service and maintenance [2]
Cotton textiles	Machinery and machine tools	Petroleum refining [2]	Telephone service and maintenance [2]
			Tobacco manufactures
			Woolen and worsted textiles

[1] During World War II most of the industry was covered by tripartite zone standard agreements, signed by representatives of unions, employers, and certain government agencies. The principal association agreement other than the zone standard agreements is between Pacific Coast Shipbuilders and the Metal Trades Department of the AFL, covering yards organized by AFL unions. [2] Less than half of 1 percent.

Area Coverage of Group Bargaining

The industries are classified by area of bargaining in table 2.

TABLE 2.—*Area of bargaining with associations or groups of employers, by industry*

Bargaining on a national or industry-wide scale	Bargaining by geographic (regional) areas	Bargaining within a city, county, or metropolitan area
Coal mining	Canning and preserving foods [1]	Baking
Elevator installation and repair	Dyeing and finishing textiles [1]	Beverages, nonalcoholic
Glass and glassware	Fishing	Book and job printing and publishing
Installation of automatic sprinklers	Hosiery	Building service and maintenance
Pottery and related products	Leather (tanned, curried, and finished) [1]	Clothing, men's [2]
Stoves	Longshoring [1]	Clothing, women's [2]
Wall paper	Lumber [1]	Confectionery products
	Maritime	Construction
	Metal mining	Cotton textiles
	Nonferrous metals and products, except jewelry and silverware [1]	Dairy products
	Paper and pulp	Furniture [2]
	Shoes, cut stock and findings [1]	Hotel and restaurant
		Jewelry and silverware
		Knit goods
		Laundry and cleaning and dyeing
		Leather products, other
		Malt liquors
		Meat packing
		Newspaper printing and publishing
		Paper products, except wall paper
		Silk and rayon textiles
		Steel products, except stoves [2]
		Tobacco
		Trade [2]
		Trucking and warehousing [2]

[1] There also is some bargaining on a city, county, and/or metropolitan area basis.
[2] There also is some bargaining on a regional and/or industry-wide basis.

Approach to Standardization of Working Conditions

One of the major efforts of labor unions in this country has been directed toward the standardization of working conditions throughout an industry or area, in order to lift substandard wages and to eliminate or reduce the factors of wages and hours in competitive costs. One of the ways the labor movement has sought to attain this objective has been by pressing for Federal or State legislation for the protection of certain groups of workers or to establish minimum standards applicable to all workers. Legislation has been sought especially for women and minors on the ground that the interests of society as a whole require that the health and welfare of these groups of workers be protected, and also because they often are in a weak bargaining position and might be used to lower the standards of all workers. Certain minimum standards of health, safety, and sanitation were established by legislation when large sections of the population felt a need for such, and the labor movement from time to time has favored legislative action as the most effective remedy for problems of health and safety. Under the Fair Labor Standards Act, minimum wage and hour standards have been established in much of American industry, thus raising the area of collective bargaining on these issues to higher levels.

Prior to World War II the approach to standardization of wages and working conditions through governmental action was secondary as far as American trade-unions are concerned. Organized labor in this country has directed its chief efforts toward standardization by means of collective bargaining. For this reason the labor movement generally has encouraged parallel organizations of employers for collective-bargaining purposes, in order to obtain extended coverage under one agreement. In some industries the employers also have favored the extension of uniform wages and working conditions by making the terms of a collective-bargaining agreement applicable to a large segment of an industry. When collective bargaining with groups or associations of employers has proved impracticable or impossible, some unions have utilized the technique of presenting identical agreements to the employers within an industry or competitive area. This latter method usually is practicable only in instances where there are a large number of small employers, particularly within a metropolitan area.

Although industry-wide trade associations have come to be a common characteristic of American business, the scope of employer groups or associations engaged in collective bargaining is generally much more limited. Within an industry, employers may be organized for purposes of collective bargaining on a city, regional or, in a few

instances, nation-wide basis, or two or more such employer organizations may exist in the same area. As a rule, the unions work toward the extension of the collective-bargaining agreement to as wide a section of the industry as possible. In a number of cases the unions and employer organizations together have directed their efforts toward bringing unorganized sections of the industry within the scope of collective-bargaining agreements. A necessary corollary of dealing through employers' associations is a high degree of unionization among the employees.

During World War II, industry-wide production drives, settling of labor disputes by the National War Labor Board on the basis of industry or area practice, and the Government's wage stabilization policies all contributed to standardization of wages and working conditions throughout industries or areas. Directives of the National War Labor Board were influenced by precedent and prevailing practices in the industry or area and many agreements in the same industry came to have similar provisions on certain subjects. Frequently an order of the Board would affect several employers and the substance of the order would be incorporated into union agreements the employers might have negotiated, without regard to the existence of an employers' association. In the shipbuilding industry, in which a stabilization commission was established, tripartite "zone standard" agreements were negotiated, covering a limited number of subjects. The parties to the agreements were the Government itself and most of the employers and unions in the industry. The shipbuilding industry in the United States was divided into four zones, in each of which the "zone standards" determined practices with regard to those subjects covered by the agreements.

The attention directed to a few national associations with long records of collective bargaining should not be permitted to obscure thousands of employer organizations which have negotiated agreements on a regional or metropolitan basis and which affect hundreds of thousands of workers. These employer groups vary widely as to type, structure, procedure, and scope of activity. Some are temporary and highly informal, with no tangible evidences of permanent organization. Others have complex structures with elaborate constitutions and a staff of full-time employees. Between these extremes there are wide variations in organization, procedures, and functions.

Nation-Wide Collective Bargaining in the Coal Industry

In anthracite mining a single agreement is signed to cover the entire industry. In bituminous-coal mining, the union negotiated agreements with the operators in the Central Competitive Field (Ohio, Indiana, Illinois, and West Virginia) from 1898 until 1927. The

agreement for this area set the pattern for negotiations in other areas between districts of the union and local associations of coal-mine operators. The interstate bargaining relationship in the Central Competitive Field collapsed in 1927 and was not reestablished until after the passage of the National Industrial Recovery Act. In 1934 an agreement was signed with the operators in the Appalachian Area which served, as the previous interstate agreement had, as a pattern which the remainder of the industry generally followed. Districts of the United Mine Workers of America negotiate agreements with parallel associations of employers, which follow the terms of the Appalachian agreement. In 1941 the northern and southern groups of operators in the Appalachian area signed separate agreements with the union, and unified negotiations were not reestablished until 1945. In that year, the first industry-wide agreement in bituminous-coal mining was negotiated.

Following the break-down of negotiations between the union and the operators in the spring of 1946, which led to a Nation-wide soft-coal strike, and the rejection by both the union and the operators of President Truman's May 16 arbitration proposal, the President on May 21 "authorized and directed" the Secretary of the Interior to take over the mines. On May 29 an agreement was signed by John L. Lewis, president of the union, and J. A. Krug, Coal Mines Administrator and Secretary of the Interior. The agreement covered all the wines which were seized.

National Bargaining on the Railroads

The traditional bargaining unit in railroad transportation is the individual railroad system. The workers are organized on the basis of craft, and agreements with the various systems are negotiated by each craft union or by "system federations" of shop craft unions. Although the regular working agreements continue to be signed by systems, on occasion certain specific questions of major importance, as wages, have been settled on a Nation-wide basis. Negotiations are generally conducted by the nonoperating unions (clerical, maintenance, and shop crafts) and by the operating unions (train and engine service) separately with representatives of the railroads selected on a regional basis.

Other Industry or Trade-Wide Bargaining

The American examples of trade-wide bargaining of longest status occur in the pottery and glassware industries. Since the early years of this century, an annual meeting has been held between the representatives of the United States Potters' Association and the National

Brotherhood of Operative Potters. The current agreement between these parties, for example, continues a provision for joint discharge committees first set up in 1913. Since 1888 the National Association of Manufacturers of Pressed and Blown Glassware, or its predecessor, has been meeting with the American Flint Glass Workers Union. The "Star Island Agreement" of 1903 established a grievance procedure which still is utilized in this industry. The Glass Bottle Blowers' Association of the United States and Canada signed its first national agreement in 1890 and currently has an agreement with the Glass Container Manufacturers' Institute which affects several thousand employees in the industry.

In each of these cases the bargaining agreements are confined chiefly to detailed piece-rate schedules, although a considerable body of "unwritten law" has developed to supplement the national agreement in governing employer-employee relations within a plant. Originally, the trade-wide bargaining was established to regulate the working conditions of highly skilled craftsmen within these industries. With the development of technological changes, one skilled occupation after another has been eliminated. As a result, the unions have extended their jurisdiction to include a major part of the workers in and around the plants and these skilled and semiskilled employees are now covered in the national agreements to the degree that they are unionized. In the glassware industry, however, there are some companies which have negotiated separate agreements. In the pottery industry virtually all of the vitreous and semivitreous branches of the industry are covered by the association agreement.

A different kind of bargaining relationship has been built up in the manufacture of flat glass. By far the major part of the production in this industry is centralized in two large producing companies. These companies, the Pittsburgh Plate Glass Co. and the Libby-Owens-Ford Glass Co., negotiate their agreements jointly, both with the Window Glass Cutters League (AFL) and the Federation of Glass, Ceramic and Silica Sand Workers (CIO), but each company signs separate, identical agreements. The two companies also collaborate in the administration of the agreement to insure uniform patterns of interpretation. Most of the other manufacturers are organized into the Fourcault Manufacturers' Association which negotiates the agreement with the unions.

There are a few other instances of industry-wide dealing, each of them originating from the efforts of a highly skilled craft to protect its conditions of employment. Among these are the Wall Paper Institute and the United Wall Paper Craftsmen and Workers of North America, covering wall paper printing; the National Automatic Sprinkler Association and the United Association of Journeymen

Plumbers and Steamfitters of the United States and Canada, covering sprinkler fitting; and the Manufacturers Protective and Development Association and the International Molders and Foundry Workers Union of North America, covering stove-molding and hot-water castings.

Employers engaged in the manufacture of paper-mill wire cloth sign similar agreements with the American Wire Weavers' Protective Association. Another instance of trade-wide bargaining occurs in the installation, repair, and maintenance of elevators. Although wage rates are negotiated locally, other working conditions are regulated by conferences between the National Elevator Manufacturing Industry, Inc., and the International Union of Elevator Constructors. A standard agreement is used in all localities, with the locally negotiated rates inserted as agreed upon.

The manufacture of wooden kegs and barrels should also be mentioned as an instance of national conferences between the employers and the union. The conferences, however, have resulted in no agreement on an industry scale and discussion of working conditions has been of far less importance than mutual discussion of trade-promotion plans.

Industry-Wide Bargaining in Mass-Production Industries

In the more recently organized, mass-production industries there are at present no examples of industry-wide collective bargaining resulting in a single union agreement covering the full range of employer-union relations. In a few such industries, however, certain bargaining relationships have come into existence which produce considerable uniformity in the agreements throughout an industry. In the rubber industry, for example, a wage-increase agreement was signed on March 2, 1946, by the four largest manufacturers, which affected a large proportion of the workers in the industry. This so-called "Big Four" agreement is limited in scope to a few subjects; it differs from the usual union agreement also in that it does not have the customary provisions relating to termination and renewal. The agreement provides: "This agreement shall finally dispose of all issues covered in these negotiations including all of the union's 7-point program for a period of 1 year except that during this 1-year period the general wage scale shall be subject to negotiation if conditions economically and in the industry warrant, but only on a four-company (Big Four) basis." If this joint relationship of the four corporations with the United Rubber, Cork, Linoleum and Plastic Workers of America is continued in the future, it may be possible to describe the collective bargaining in this industry as approaching industry-wide negotiations.

A degree of standardization has been achieved in the meat-packing industry through the medium of uniform expiration dates of the agreements with the principal packers. Certain agreements affecting a large number of workers negotiated by the United Packinghouse Workers of America (CIO) and by the Amalgamated Meat Cutters and Butcher Workmen of North America (AFL), covering various plants of the four largest corporations in the industry, have expired on the same day each year for several years.

Negotiation of Similar Agreements in the Steel Industry

In the basic steel industry in the United States there is no employers' association which engages in collective bargaining, yet a great deal of standardization in industrial relations has occurred in recent years. The industry is composed of two dominant groups of employers, one known as "Big Steel" and the other as "Little Steel." The first includes the United States Steel Corp. and its subsidiaries, and the second is made up of a number of independent companies. The Steel Workers Organizing Committee, now the United Steelworkers of America, first signed written agreements with the U. S. Steel Corp. in 1937 and since then, with a few exceptions, practically all of the basic steel industry has been brought under agreement. Even though there is no bargaining by employers' associations, the major provisions of agreements throughout the basic steel industry are similar. This degree of uniformity is occasioned by a number of factors, first among them probably being the predominant position of the United States Steel Corp. Agreements with this corporation tend to set the pattern for the rest of the industry. Also, by long-established practice the same wage adjustments generally are made throughout the industry at the same time. During World War II directives of the National War Labor Board, which generally were applicable to large sections of the industry, further encouraged the growth of uniform collective-bargaining practices. The United Steelworkers of America, the most important union in the industry, also tended to bring a degree of uniformity into the bargaining relationships and practices. Agreements with most of the employers in the basic steel industry will expire in February 1947, and negotiations are in process for new agreements. (Since this was written the parties have agreed to extend the agreements until April 30, 1947.)

Collective Bargaining by Geographic Areas

In the hosiery industry a bargaining relationship has existed between the Full-Fashioned Hosiery Manufacturers of America, Inc., and the American Federation of Hosiery Workers since 1927. The

employers' association, originally covering only Philadelphia mills, now covers a major part of the northern section of the full-fashioned hosiery industry. Conferences occur annually, with occasional additional meetings on specific subjects. Under the agreement the joint relations are administered by a permanent impartial chairman.

In the textile industry there are association agreements between the Textile Workers' Union of America and associations of silk and rayon mills in a number of States. A joint arrangement of longer standing exists in the dyeing and finishing of textiles in nonintegrated mills. In cotton textiles in Massachusetts and in knit goods in Philadelphia and New York, many of the employers are members of associations which negotiate union agreements.

Maritime workers usually deal with employer organizations which represent the shipping operators on a given coast. Practically all the union agreements in the maritime industry are negotiated with associations or informal committees representing the employers. On the Pacific Coast the companies are organized into the Pacific American Shipowners Association. On the Atlantic and Gulf Coasts the most recent agreements were negotiated and signed by a Committee for Companies and Agents, Atlantic and Gulf Coasts, most of the members of which are also members of the American Merchant Marine Institute.

The Waterfront Employers of the Pacific Coast embraces employers of longshoremen along the entire West Coast; much of the work of the association, however, is carried on through affiliated local Waterfront Employers Associations in Seattle, Portland, San Francisco, and San Pedro (Los Angeles). The International Longshoremen's and Warehousemen's Union (CIO) negotiates a general cargo agreement with the coast-wide association, which signs "on behalf of" the four local organizations. Separate agreements covering dock workers and ship clerks are negotiated with each of the port associations. On the Atlantic Coast the International Longshoremen's Association (AFL) as a rule, negotiates separate agreements with employer associations in each port.[2]

In the Pacific Northwest the pulp and paper industry, although dealing elsewhere on the basis of individual companies, is combined

[2] For some time there has been no formal federated organization of the unions in the maritime industry. For a few months during 1946, however, the CIO unions and an independent formed the committee for maritime unity for the purpose of joint negotiations with all employers simultaneously. The American Federation of Labor, also in 1946, established a Maritime Trades Department, composed of AFL unions in the industry. Most of the unlicensed personnel on the Atlantic Coast are represented by the National Maritime Union (CIO). On the West Coast these workers are represented principally by three unions, the Sailors' Union of the Pacific (AFL), the Pacific Coast Marine Firemen, Oilers, Watertenders and Wipers Association (independent), and the National Union of Marine Cooks and Stewards (CIO).

into the Pacific Coast Association of Pulp and Paper Manufacturers which deals with the two national unions in the field. The unions, representing different occupations in the industry, are the International Brotherhood of Papermakers and the International Brotherhood of Pulp, Sulphite, and Paper Mill Workers. The employers' organization is described in the agreement as follows: "This Pacific Coast Association of Pulp and Paper Manufacturers * * * of which the signatory company is a member, is an employer association of a majority of the pulp and paper manufacturing companies in the Pacific Coast area, comprising the States of Washington, Oregon, and California, and as bargaining agent with authority to bind its members by a majority vote of such mills, has met with a bargaining committee from the signatory union for a period of years, beginning in 1934 * * *." Notwithstanding this provision, each company signs a separate document with the local unions which represent its employees.

The lumber industry is one which is not yet well organized throughout the country but in which the dominant method of present dealing is through associations within the producing area. The Columbia Basin Loggers' Association and the Timber Producers' Association in Minnesota are examples of associations dealing with the union in this industry.

The fishing industry, particularly on the Pacific Coast where it is well organized, is an example of collective bargaining almost exclusively on an association basis. The employers, however, are organized into a number of separate associations, such as the Alaska Packers' Association and the Central Pacific Wholesale Fish Dealers' Association.

In retail trade, the National Association of Retail Meat Dealers, composed of affiliated State and local associations throughout the United States, negotiates with the Amalgamated Meat Cutters and Butcher Workmen of America. The national agreement between these parties, first negotiated in 1937, is confined to a statement of principles and policies of mutual interest to both parties, who agree to "give their aid and good offices to the execution of fair and reasonable contracts between local unions and affiliated associations in the various localities where the said unions and affiliated associations exist." The agreement further states that it is recognized "that local conditions require local treatment and that it is not practical or feasible to include in this agreement the matters of wages, hours, and conditions of employment." In the Midwest, the Central States Drivers' Council, an organ of the International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America (AFL) negotiates agreements with the Central States Area Employers Association Negotiating

Committee. Collective bargaining in canning and preserving foods on the West Coast is largely on an association basis.

Most of the shipbuilding and boatbuilding industry on the West Coast is covered by a master agreement negotiated by the Metal Trades Department of the American Federation of Labor. During the war, as previously noted, bargaining on major issues in this industry was on a tripartite basis, and wages and certain other questions were determined by the zone standards. Issues not covered by the zone standards were settled in the ordinary processes of collective bargaining. At the present time the zone standards are still in effect.

Bargaining in the Needle Trades Within Metropolitan Areas

Outstanding examples of stable bargaining relationships over a long period of time between employers' associations and unions are found in the needle trades. In the men's and women's clothing, men's hats and millinery, and fur industries the earliest efforts of unions to organize were accompanied by efforts to combine into associations the employers within the producing area. Bargaining has become established in these industries, with highly developed industrial relations machinery within each of the metropolitan areas which are important as producing centers. These unions and employers' associations customarily make use of a permanent impartial chairman to administer the agreement and there are numerous examples of joint trade boards, stabilization commissions, and other similar bodies which deal on a day-to-day basis with the problems of the industry.

These industries all have the problem of "run-away" shops, which leave the unionized areas and, with the small capital investment required, are able to establish themselves in low-wage, semirural sections. This has been a major reason for the unions' insistence upon dealing on an association basis, for it is through the combined pressure of both the union and the employer association that these "run-away" shops can be brought under control. Another problem within these industries is the regulation of the jobber-contractor relationship. Jobbers have taken advantage of both the extreme seasonal fluctuations and the small investment required in setting up a shop to encourage an oversupply of contractors. Cut-throat competition among the contractors has been furthered by the frequent practice of establishing "fly by night" shops for the duration of a contract secured by underbidding regularly operating shops. Both the owners of shops operating under union conditions and their workers have thus faced a constant threat to industrial stability. Through collective bargaining, the oversupply of contractors has been dealt with and the jobber's responsibility for maintaining union conditions in his contract shops

has been established. A large portion of the employer-union negotiations in the needle trades deal with these three-way problems, in addition to the usual wages, hours, and working conditions.

The employers within a given city are usually organized into more than one association within each of the needle trades. The basis of distinction is both the type of product and the classification of employers (i. e., jobbers, contractors, or inside manufacturers). The unions have frequently expressed a desire for more uniformity among the employers' organizations throughout the industry. Although a major part of the production in the country is covered by the New York City agreements alone, the unions have made repeated efforts over several decades to secure industry-wide dealing in the interests of national standardization. Thus far, however, only in men's clothing has there been a successful approach to industry-wide bargaining. For a number of years the Amalgamated Clothing Workers of America has negotiated major wage questions with the Clothing Manufacturers' Association of the United States and with the Shirt Industry.

Other City-Wide Bargaining

In many industries and trades characterized by numerous small establishments within a city, collective bargaining has been conducted with associations of employers within the city. In many cases the associations are formal organizations in which the association officers have the power to bind all members to the agreed terms of employment. In other cases the employers may unite informally and perhaps only for the duration of the bargaining conferences. In many instances the lack of a continuing employers' association makes no difference in the actual negotiation of the agreement, but complicates considerably the enforcement of the agreement.

In cases of city-wide bargaining the extent of coverage of the employers' association generally depends upon the strength of the union. It is common to find within a city an organized group of employers dealing with the union, while other employers within the same industry are organized into a separate association or have no organization. In some cases the union employers form an organized group within a trade association which also includes nonunion employers in the city.

There are probably 5,000 local or city employer associations throughout the country which deal with various unions. More of these are found in building construction than in any other single industry. Other examples, in which the predominant method of dealing is with city-wide associations, are brewing, retail trade, baking, printing and publishing, restaurants, trucking, and barber shops.

An important development is found in the electrical machinery industry, where the United Electrical, Radio and Machine Workers of America (CIO) recently negotiated an agreement with the Electronics Manufacturers' Association, representing 20 employers in the New York City area. This association was formed at the insistence of the employers, who are relatively small and who previously had signed separate agreements. The employers desire, through negotiating a single blanket agreement, to achieve a degree of uniformity in wage and working conditions in order to reduce these as competitive factors in costs.

Associations of Employers Across Industry Lines

Employer-group federations embracing all types of business within a city are largely a development of the last 10 years and are concentrated in the Far Western States. Leader in this field is the San Francisco Employers Council, formed in 1939, and which in April 1945 had 1,995 members, 919 of whom were affiliated through their various industry groups. The other members were individuals or independent companies. The objectives of the council, as stated in its articles of incorporation, are (1) to encourage the organization of autonomous employer groups and cooperation among these groups in matters relating to labor relations; (2) "to promote the recognition and exercise of the right of employers to bargain collectively"; and (3) upon request, "to assist its members and others in matters relating to the negotiation, execution and performance of fair labor contracts." The council negotiates or participates in negotiations of agreements between its members and the unions in the city, and performs various other services.

Of a similar character is the Industrial Conference Board of, Tacoma, Wash.—an over-all agency for a number of independent companies and 15 or 20 employers' associations each of which has one or more union agreements. Both the Reno Employers Council of Reno, Nev., and the Silver Bow Employers Association of Butte, Mont., participate in the negotiation of labor contracts for their various employer groups. In Sacramento, Calif., the Sacramento Valley Associated Industries is the unifying agency for a dozen or more associations covering such varied fields as bowling alleys, beverages, furniture warehouses, taxicabs, machine shops, liquor and tobacco dealers, retail foods, wholesale bakeries, draymen, druggists, tire dealers, and building owners. Each association has a union contract signed in its behalf by an individual, who serves both as executive secretary to the associations and as general manager of the Associated Industries.

Postwar Labor Turn-Over Among Women Factory Workers [1]

WOMEN HAVE RETAINED 1 million of the 2½ million additional production jobs which they acquired in the period from October 1939 to the war peak in November 1943 (see chart). About half the job increase from the prewar period has been concentrated in the higher-paying durable-goods industries. Despite the increased availability of men, these industries which are traditionally staffed by men now employ over 800,000 women—almost 2½ times as many as in 1939. Actually, one-fourth of all women production workers in November 1946 were employed in the heavy-goods industries.

Even in the nondurable-goods industries where three-fourths of all women production workers are employed, the war has broadened the field for women. For example, 1 out of every 5 production workers in chemical manufacturing is a woman.

At the war's end 3,882,000 women were employed in manufacturing industries. One month later, their employment had dropped to 3,207,000, a loss of 675,000 production jobs. In addition to large scale lay-offs, considerable numbers of women voluntarily quit their jobs as men were demobilized. The low point in the employment of women came in February 1946, when only 2,934,000 women production workers were on factory pay rolls. After that reconversion low, employment of women gained, and by November 1946, 3,265,000 women held production jobs in manufacturing industries. However, the November 1946 employment level of women represents a decline from the war's end of 617,000 production jobs.

Lay-Off Rates [2]

Soon after VJ-day, lay-offs claimed 175 out of every 1,000 women in manufacturing industries, almost double the rate for men. In the heavy-industry groups, involuntary separation rates—mostly lay-offs—were consistently higher for women than for men from August 1945 through May 1946, a year after VE-day. It was during this same period that three-fourths of the veterans now employed in

[1] Prepared by Clara F. Schloss and Ella Joan Polinsky in the Bureau's Employment Statistics Division. This study relies primarily upon the turn-over rates for women in manufacturing establishments published monthly by the Bureau of Labor Statistics. The tabulated rates, covering hires, total separations, and quits, are based on reports of some 6,800 establishments employing around 4,200,000 workers. This sample is somewhat smaller than the one for all employees in manufacturing industries, as some firms do not report separate data for women.

[2] Involuntary separation rates are based on terminations of employment initiated by employers, such as lay-offs and discharges. It also includes military and miscellaneous separations. Because lay-offs are the significant element in women's involuntary separations, the terms have been used interchangeably.

manufacturing obtained jobs. From June to November of 1946, after demobilization had slackened, the involuntary separation rate was no higher for women than for men.

Since both men and women felt the greatest impact of the ending of the war in the first 2 months after VJ-day, a more reliable indication of the current attitude toward women is gained from an analysis of turn-over statistics from November 1, 1945, to November 30, 1946. Among the major industrial groups, only iron and steel and petroleum products reported higher involuntary separation rates for women than for men in each month of this period.

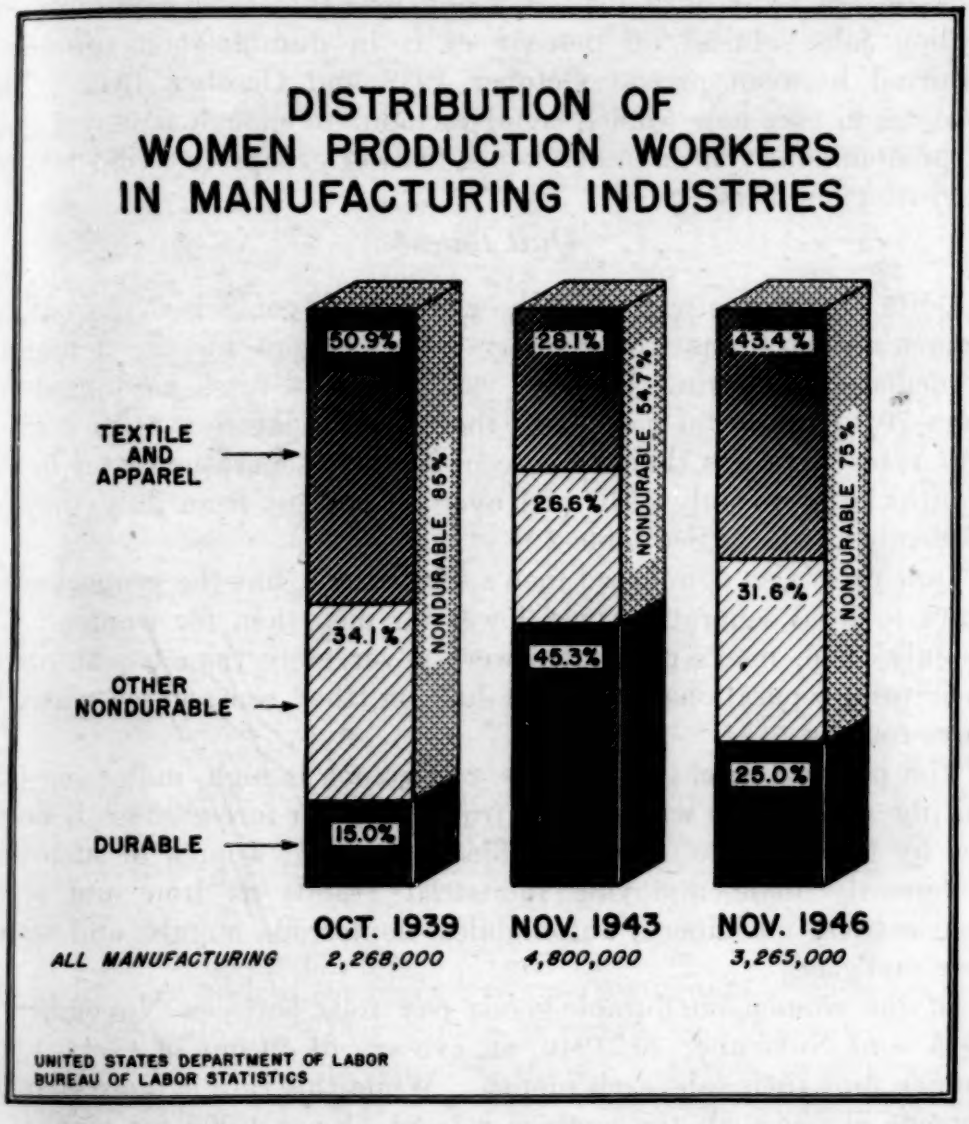
TABLE 1.—*Monthly involuntary separation rates of women in manufacturing industries, November 1945–46* [1]

Industry group	Rates per 100 women employees												
	1945		1946										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.[2]
All manufacturing	2.1	1.7	2.2	1.9	1.9	1.7	1.7	1.3	1.0	1.0	1.1	1.2	1.0
Durable goods	4.1	3.0	4.2	3.6	3.2	2.6	2.8	1.6	1.2	1.4	1.3	1.5	1.5
Nondurable goods	1.3	1.1[2]	1.4	1.5	1.4	1.5	1.3	1.2	.9	.7	1.1	1.2	.7
Iron and steel and their products	2.5	2.5	3.2	2.7	4.2	2.9	3.1	1.8	1.3	1.4	1.4	1.8	1.2
Electrical machinery	2.4	1.6	2.8	2.3	2.8	2.5	2.0	1.8	1.2	1.3	1.3	1.2	1.5
Machinery, except electrical	2.2	2.6	3.3	2.8	2.3	2.2	2.4	1.3	1.0	1.3	.9	1.2	1.1
Transportation equipment, except automobiles	10.5	7.1	9.1	9.6	9.8	7.2	6.7	3.3	2.6	2.3	3.0	2.9	2.6
Automobiles	2.6	5.1	16.1	4.5	3.6	2.0	6.9	1.4	1.5	2.3	2.4	3.5	3.4
Nonferrous metals and their products	1.7	2.4	4.4	1.9	2.0	2.0	1.3	1.0	.8	1.5	.9	1.0	1.1
Lumber and timber basic products	6.9	2.0	5.9	3.1	.9	.8	1.1	.6	.6	.4	1.0	.6	1.1
Furniture and finished lumber products	1.9	1.8	2.7	2.8	1.5	1.2	1.2	.9	1.0	1.3	1.3	1.3	1.4
Stone, clay, and glass products	1.9	2.3	2.7	1.4	1.2	1.5	2.6	.9	1.2	.7	.8	.9	1.3
Textile-mill products and other fiber manufactures	.7	.6	.8	.7	.7	.6	.6	.6	.6	.5	.6	.5	.6
Apparel and other finished textile products	.5	.7	.5	.9	.7	.8	.5	.4	.4	.3	.4	.6	.5
Leather and leather products	.8	.6	.6	.7	.7	.6	1.0	.8	.6	.5	.5	.6	.6
Food	2.8	1.8	2.8	3.4	4.4	4.9	4.7	4.2	2.6	1.8	3.4	3.6	1.2
Tobacco manufactures	3.0	3.8	4.0	2.6	1.8	1.1	1.7	.5	.9	1.1	.7	.7	1.0
Paper and allied products	1.9	1.6	2.0	1.5	1.4	.9	.9	.8	.9	.5	.8	.5	1.0
Chemicals and allied products	3.0	2.5	3.5	2.9	3.1	1.7	1.0	.9	.8	1.0	1.0	1.3	1.0
Products of petroleum and coal	2.3	6.3	6.6	3.7	4.3	4.5	3.8	1.6	2.6	2.2	1.2	1.0	.8
Rubber products	1.0	1.0	1.9	1.1	1.4	1.4	1.1	.6	.5	.7	.7	.7	.9
Miscellaneous industries	1.1	1.4	2.1	1.7	1.8	1.6	1.5	1.3	1.2	1.4	1.4	1.4	1.0

[1] Based on BLS series of monthly labor turn-over rates for men and women in all manufacturing and major industrial groups; covering some 6,800 establishments employing around 4,200,000 production and salaried workers.
[2] Preliminary data.

In addition to iron and steel, involuntary separation rates were generally higher for women than for men in such important durable-goods groups as automobiles, and both electrical machinery and non-electrical machinery. In two heavy-goods groups—transportation equipment and lumber—rates for women were lower than rates for men in more than half of the months. The circumstance that women

are not being separated from their jobs in some of the heavy industries at an even higher rate may be attributed in large measure to seniority rights which they acquired in the war period. In certain groups, also, their retention may be due to their employment in special classifications designated as "women's jobs."



In the nondurable-goods component of manufacturing, involuntary separation rates for women were consistently lower than for men in every month of the period except October 1946. The lay-off rates for women tended to be higher than those for men only in the chemicals, rubber products, petroleum, and miscellaneous industries groups. However, even in these groups, involuntary separation rates for women were lower in November 1946 than in the previous year. This trend toward reduction of lay-offs is characteristic of periods of high employment. (See table 1.)

Current employment,[3] although more than 1½ million below the war peak (see chart), is still about a million above the level of October 1939. It is noteworthy that the current employment level is approximately the same as in October 1942, when around 3,400,000 women were on factory pay rolls. Since mass hiring of women on production jobs did not begin until 1943, it is apparent that their gain of over a million jobs—almost 60 percent of it in durable-goods groups—occurred between prewar October 1939 and October 1942. This explains in part how women could accumulate enough seniority even in predominantly men-employing industrial groups to avoid lay-offs in greater numbers.

Quit Rates[4]

Quits, in the postwar as in the war period, comprised the bulk of women's separations from factory jobs. Except for the 2 months immediately following VJ–day, women's quit rates accounted for from 70 to nearly 90 percent of their total separation rates. Their quit rates were less than 80 percent of their separation rates in the months prior to July 1946 and over 80 percent from July through November 1946. (See table 2.)

Quit rates also dominated men's separations, but the proportion of quits to total separations was lower for men than for women. Up to July 1946, men's quit rates were never more than two-thirds of their total separations, but from July on, they represented closer to three-fourths.

The postwar level of quit rates for women is high, indicating job-shifting as much as withdrawals from the labor force. This is borne out by the presence of still sizable numbers of women in such predominantly male-employing industrial groups as iron and steel, nonelectrical machinery, automobiles, nonferrous metals, and stone, clay, and glass.

Of the women on durable-goods pay rolls between November 1, 1945, and November 30, 1946, an average of 49 out of every 1,000 women quit their jobs each month. While this rate is more than 20 percent higher than the average rate of 41 per 1,000 for men, it is less than the average quit rate of 57 per 1,000 for women in the nondurable-goods groups.

Among the durable-goods groups, the highest quit rates for women, averaging 63 and 71 quits per 1,000, were found in the relatively low-paying, hazardous lumber and furniture groups. The highest quit

[3] For estimates of number of women production workers in manufacturing industries see series on Women in Factories prepared in Employment Statistics Division.

[4] Quit rates are based on termination of employment initiated by employees regardless of reasons such as dissatisfaction with hours, wages, working conditions, labor policies, local housing, or transportation, or obtaining another job.

rates of men also occurred in these groups. The quit rate for men in lumber industries averaged 74 per 1,000. This is the only durable-goods group in which the quit rate was higher for men than for women, but relatively few women were on the pay rolls of this group.[1]

TABLE 2.—*Monthly quit rates for women in manufacturing industries, November 1945–46*

Industry Group	Rates per 100 women employees												
	1945		1946										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.[2]
All manufacturing	5.7	4.9	5.7	5.1	5.3	5.3	5.4	5.0	5.6	6.5	6.5	5.7	4.7
Durable goods	5.1	4.6	5.4	4.5	4.8	4.8	4.6	4.5	4.7	5.6	6.0	5.1	4.2
Nondurable goods	5.9	5.1	5.8	5.2	5.5	5.4	5.7	5.2	5.9	6.9	6.7	5.9	4.9
Iron and steel and their products	5.2	4.7	5.6	5.0	5.2	5.1	4.6	4.2	5.2	5.6	5.8	4.8	4.5
Electrical machinery	4.1	3.7	5.0	4.6	5.0	5.0	5.1	4.9	4.9	6.1	6.4	5.8	5.1
Machinery, except electrical	4.3	3.6	4.2	3.5	3.9	3.9	3.4	3.5	3.5	4.6	4.9	3.8	2.9
Transportation equipment except automobiles	5.5	5.0	5.1	4.1	4.0	3.4	3.5	3.7	3.3	3.8	4.4	3.8	2.7
Automobiles	4.5	4.6	5.0	3.8	3.8	4.0	3.6	3.7	3.3	4.3	4.5	4.3	3.1
Nonferrous metals and their products	4.5	3.6	5.0	4.2	3.9	4.6	4.3	4.6	5.0	6.1	6.5	5.1	4.1
Lumber and timber basic products	7.9	9.4	8.4	6.3	5.0	6.1	5.6	4.6	5.4	6.1	7.1	5.5	5.1
Furniture and finished lumber products	7.9	6.4	7.9	6.5	6.8	6.4	6.5	6.5	7.0	8.4	8.6	7.2	5.6
Stone, clay, and glass products	5.0	4.1	4.9	4.0	4.7	5.2	5.2	4.9	4.9	5.3	5.7	4.7	3.5
Textile-mill products and other fiber manufactures	5.5	4.9	5.9	5.2	5.6	5.6	5.9	5.4	5.9	6.1	5.8	5.4	4.5
Apparel and other finished textile products	5.7	4.5	5.3	4.6	5.2	5.4	5.6	5.0	6.2	7.3	6.3	5.6	4.8
Leather and leather products	5.7	5.4	5.6	5.3	5.6	5.8	5.6	4.9	6.2	7.2	6.8	5.9	4.1
Food and kindred products	8.2	7.8	7.4	7.9	7.0	6.2	7.2	6.7	6.7	8.5	9.6	8.7	7.7
Tobacco manufactures	6.1	4.0	6.8	4.1	6.0	6.7	6.6	6.3	5.7	6.9	5.8	5.4	4.7
Paper and allied products	7.2	5.6	6.9	5.9	6.3	6.0	5.9	6.4	6.7	8.2	9.6	7.1	5.2
Chemicals and allied products	4.3	3.4	4.0	3.7	3.6	3.6	3.4	3.7	3.8	4.2	4.5	3.4	2.5
Products of petroleum and coal	4.8	4.8	4.9	3.5	3.3	3.0	3.7	3.3	3.3	3.8	4.2	3.1	2.7
Rubber products	5.0	4.4	6.0	5.0	4.8	5.0	4.7	4.8	5.0	5.5	6.0	5.5	4.0
Miscellaneous industries	3.7	3.6	4.5	4.0	4.3	4.3	4.3	4.0	4.1	5.0	5.4	4.8	3.4

[1] Based on BLS series of monthly labor turn-over rates for men and women in all manufacturing and major industrial groups; covering some 6,800 establishments employing around 4,200,000 production and salaried workers.
[2] Preliminary data.

The food group had the highest women's quit rate of all soft-goods groups—77 quits per 1,000 women as compared with only 46 quits per 1,000 men. In the apparel group, which is predominantly staffed by women, the quit rate was 55 per 1,000 women, and the rate for men was only 31 quits per 1,000. The textile group, which ranks next as an employer of women, also had a women's quit rate of 55 per 1,000, not too different from the quit rate for men of 47 per 1,000.

The lowest quit rates for women in major manufacturing groups occurred in the high-wage petroleum and coal products group and in the chemical group. However, the rate of 37 quits per 1,000 women in each group was considerably greater than the corresponding rates of 12 and 22 quits per 1,000 men.

While the quit rates for women are high, there is evidence that family responsibilities keep many women in their jobs.[5] Older women are reluctant to quit because of the trend toward more rigid hiring specifications in respect to age and experience to be faced when seeking new employment. Some women apparently stay on in the expectation of eventual lay-off. Others continue working to give ex-GI husbands a longer period of time to adjust to civilian life than would be possible if the veteran were the only breadwinner. Wives of disabled veterans stick to the job to lighten the financial burdens of the home. There are also numerous other reasons why fewer women quit their jobs than had been anticipated, such as good pay, pleasant working conditions, satisfaction with the type of work, unwillingness to look for other jobs in less skilled classifications, and hesitation to return to domestic duties.

Hiring Rates

Hiring rates for women (like separation rates) still exhibit the high levels characteristic of the war period.[6] The hiring rate in November 1946 of 67 per 1,000 women was not too different from the rate of 71 per 1,000 in November 1944, when war production was in full swing, or 73 per 1,000 in November 1945, during the reconversion period.

It should not be inferred from the high level of their hiring rates alone, that large numbers of women are being absorbed into the postwar work force. On the contrary, not until the comparatively recent period of June to November 1946, were the hiring rates for women sufficient to more than offset their separation rates. Moreover, it is apparent from statistics on the employment of women production workers after VJ-day, that an over-all employment gain of only about 60,000 production workers occurred between September 1945 and November 1946. Men gained about 1,600,000 production jobs in this period, more than 22 percent compared with women's gain of 2 percent.

The demand for women workers, as gauged by the industrial hiring rate, averaged 70 for every 1,000 women on factory pay rolls between November 1945 and November 30, 1946. Seasonally low December was the only month in which the rate fell below 62 per 1,000 women. (See table 3.)

In the durable-goods groups, in which less than one-fourth of the women in manufacturing were employed throughout most of the

[5] See U. S. Women's Bureau Bulletin No. 209: Women Workers in Ten War Production Areas and Their Postwar Employment Plans (pp. 19-22). Washington, 1946.

[6] Hiring or accession rates are based on the total number of persons added to the pay roll during the month. Employees returning to work after vacations or furloughs from work not exceeding 10 days are excluded from the computation.

period following VJ-day, the hiring rates averaged around 68 per 1,000 women and 73 per 1,000 men. In the nondurable-goods component in which women have always comprised a sizable portion of the work force, the hiring rate averaged 70 per 1,000 women and 66 per 1,000 men.

The greatest demand for the services of women in the durable-goods component appeared to be in the electrical machinery group. In September 1945—1 month after VJ-day—over 179,000 women, or almost 6 percent of all women on industrial pay rolls, were employed in this group. In November 1946, when it was apparent from the declining ratio of women to total employees that women were being hired at a lower rate than men, women nevertheless showed an actual employment gain of over 44,000. About 7 percent of all women in manufacturing were employed in this group in November 1946.

TABLE 3.—*Monthly hiring rates for women in manufacturing industries, November 1945–46*[1]

Industry group	Rates per 100 women employees												
	1945		1946										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.[2]
All manufacturing	7.3	4.9	7.7	6.4	6.5	6.2	6.5	7.0	7.5	8.0	8.3	7.6	6.7
Durable goods	6.5	5.1	7.6	5.8	6.4	6.3	6.1	7.3	7.6	7.7	8.4	7.7	5.7
Nondurable goods	7.7	4.9	7.7	6.5	6.5	6.2	6.6	6.8	7.5	8.1	8.3	7.6	7.0
Iron and steel and their products	5.8	4.0	7.4	5.6	6.2	6.4	6.0	6.4	7.6	7.3	7.3	7.0	5.4
Electrical machinery	7.5	6.9	10.5	8.7	8.0	7.0	6.3	8.0	8.5	8.9	9.8	9.0	7.6
Machinery, except electrical	4.3	3.2	4.8	8.3	4.1	5.1	4.5	5.8	5.5	5.5	6.2	5.9	4.6
Transportation equipment, except automobiles	5.4	4.9	4.3	3.8	4.4	5.2	4.7	5.1	5.4	5.9	6.7	6.4	4.4
Automobiles	12.1	7.8	10.3	6.9	8.9	7.0	7.4	7.5	7.5	8.7	8.9	8.6	4.4
Nonferrous metals and their products	7.1	4.2	8.5	7.6	7.3	7.1	6.3	7.5	7.9	7.3	9.4	7.7	5.6
Lumber and timber basic products	4.7	3.4	2.9	3.0	3.2	6.3	6.3	6.9	8.2	7.8	8.7	5.9	3.2
Furniture and finished lumber products	9.6	5.3	7.8	6.1	8.4	6.4	9.1	10.1	8.9	9.4	11.3	9.4	7.7
Stone, clay, and glass products	5.4	4.4	7.9	6.0	5.6	5.6	5.1	7.9	8.5	7.0	7.4	6.6	4.2
Textile-mill products and other fiber manufactures	7.0	5.0	8.0	6.5	6.5	6.0	6.3	6.6	6.4	6.8	7.1	6.8	5.8
Apparel and other finished textile products	7.3	3.8	8.0	6.1	6.5	6.3	7.0	7.0	6.4	7.5	7.5	7.4	6.4
Leather and leather products	7.0	5.6	8.0	6.7	6.8	6.5	7.0	6.6	6.5	6.0	6.9	6.0	5.2
Food	12.6	7.7	8.3	9.0	7.3	7.2	7.0	7.1	13.2	14.2	14.0	11.3	14.3
Tobacco manufactures	5.1	4.2	8.2	6.3	8.3	7.1	6.9	8.2	10.0	8.2	8.5	8.4	6.2
Paper and allied products	6.8	4.1	7.6	6.1	6.7	6.6	7.1	9.2	8.1	8.1	9.0	8.2	6.0
Chemicals and allied products	4.2	3.0	4.4	3.5	3.8	3.9	3.7	5.6	5.5	4.4	4.9	4.6	3.7
Products of petroleum and coal	1.9	1.6	2.7	2.3	3.7	3.3	2.9	3.4	3.1	3.8	5.2	4.4	3.4
Rubber products	7.2	5.2	8.6	7.1	6.1	5.9	5.5	6.2	6.4	7.1	8.2	7.1	5.5
Miscellaneous industries	6.0	3.9	6.6	6.3	6.6	5.7	6.5	6.4	6.6	6.1	6.9	6.9	5.0

[1] Based on BLS series of monthly labor turn-over rates for men and women in all manufacturing and major industrial groups; covering some 6,800 establishments employing around 4,200,000 production and salaried workers.
[2] Preliminary data.

Although comments are not available as to the jobs for which women were selected in the electrical machinery industry, job referrals of the United States Employment Service and forecasts of the industry's needs in the next few months indicate that women were being

considered for or placed in unskilled and semiskilled classifications. Many areas reported difficulty in recruiting women trainees in electrical industries.[7]

That a considerable demand for women's services existed in other heavy-goods groups is evident from the excess of hiring rates over total separation rates in all groups, except transportation equipment, in at least 4 months of the period June–November 1946. The increase in employment of women in heavy-goods groups since the reconversion low in February 1946 was around 185,000, with about 100,000 jobs in groups other than electrical machinery.

Among the nondurable-goods groups, where three-fourths of the women in manufacturing industries were employed in November 1946 (see chart), the textile and apparel groups accounted for almost 44 percent. For women on textile products pay rolls the hiring rate averaged 65 per 1,000 in the period November 1, 1945, through November 30, 1946; but for men it averaged somewhat higher, around 73 per 1,000 men. In apparel, the hiring rate of 67 per 1,000 women was considerably higher than that for men—53 per 1,000. However, in both these groups the margin between the hiring and separation rates tended to be greater for men than for women, reflecting in some measure, the influence of veteran training programs.

The textile and apparel groups combined reported record employment levels in November 1946, reflecting the addition of about 185,000 women workers after VJ-day. While reports from the United States Employment Service confirm a sustained demand for women workers in these industrial groups, they indicate a specific need for semiskilled and unskilled workers, with a considerably smaller demand for skilled workers. The difficulty in meeting this demand may be attributed in part to the relatively low weekly earnings for both men and women in these industries—$38 in the textile and $36 in the apparel groups in November 1946.

Although the hiring rate of women in the food industries was generally higher than that of men (averaging 102 per 1,000 women and 85 per 1,000 men), women's separation rate of 109 per 1,000 as compared with only 78 per 1,000 for men kept the level of employment of women in the industry from rising. In part, hiring of both men and women was retarded by livestock shortages in slaughtering and meatpacking plants, which were not alleviated until November 1946. Traditionally, about 1 out of every 10 women on factory pay rolls is employed in the food group. Weekly earnings in November 1946 for all production workers in the industry averaged almost $45.

[7] Labor Market Information Area Series, September 1946 Current supplements, United States Employment Service.

The leather and leather products group, another large employer of women, normally accounting for about 5 percent of all women in manufacturing, hired during the period at a rate averaging 65 accessions for every 1,000 women on the pay rolls. Men were hired at a lower rate—55 per 1,000 men—but their separation rate (45 per 1,000 men) was also lower than that for women (64 per 1,000 women). Weekly earnings for both men and women in this group, as in textiles and apparel, were relatively low, averaging $37 in November 1946.

The hiring rates of women in the tobacco and rubber industries exceeded their total separation rates in each month of the period June to November 1946. They were also higher in every month except August in the miscellaneous industries group, which includes such important postwar industries as pianos and toy manufacturing. Employment gains in these groups added about 35,000 women production workers to the industries' pay rolls, an increase of about 14 percent from September 1945 to November 1946.

It becomes quite evident that while the over-all hiring rate of women in manufacturing as a whole was not too different from that of men from November 1, 1945, to November 30, 1946—the rates being 70 per 1,000 women and 71 per 1,000 men—much of the hiring of women served only to replace quits. Apparently industry prefers to hire women to replace women who quit. From June through November 1946, the monthly hiring rates for women were sufficiently above their separation rates to indicate a rising employment trend.

Magnitude of Turn-Over Problem

Just how much personnel activity takes place cannot be fully gauged by changes in employment nor by a review of separation and accession rates. The magnitude of the labor turn-over problem in the period since the end of World War II is best judged by an analysis of the number of personnel actions which combined to bring about the net decline of about 600,000 in the employment of women. Actually, women quit about 2¼ million jobs after VJ-day. In addition, employers laid off slightly more than 1 million women during the same period. The hiring of 2¾ million women partially offset these separations. In total, therefore, almost 6 million personnel actions are reflected in the net reduction in employment of 600,000 women production workers after VJ-day. It must be remembered that numerous personnel actions are involved in maintaining stable employment even in normal times.

Full Employment Patterns, 1950: Part 2[1]

Full Employment Levels of Demand

THE PRIMARY objective of this study is to obtain a statistical picture of output and employment in the different industries under full employment conditions. From the preceding analysis,[2] it is clear that something new, something not contained in the framework of prewar behaviour and institutions, must be introduced. Within the structure of the present assumptions, there is only one general method by which this can be done—an increase in the level of final demand.

By departing from the basic assumptions, further methods might, of course, be found. Analysis of the effects of lowered working hours, or of greatly increased government expenditures, or of incentives toward later schooling and earlier retirement, might yield balanced economic models embodying little unemployment. Exploration of these other possibilities is, however, outside the scope of the present analysis.

One might begin by considering all the general policies or social actions which could have the effect of raising final demand. It is within the relative merits of such policies that most arguments about full employment center. Alternatively, one may simply assume that these policies or actions, whatever they are, have been carried into effect, without specifying the policies themselves, and that demand has been raised to the necessary levels. The latter alternative has been chosen.

There is, of course, no unique way of increasing the level of demand to provide full employment. We might assume that one component only, say consumer demand, had been increased the necessary amount, with all other components held at previously estimated levels. On the other hand, each component might be increased by the same proportionate amount. It was felt that the most useful results would be obtained by investigating the effects of the two contrasting extreme methods of raising demand, since this would also permit judgment regarding intermediate possibilities.

Two different models of a full employment economy have been obtained. One is the result of holding investment demand and government demand at previously estimated levels, but augmenting the estimated level of consumer demand by the amount necessary to yield

[1] Part I of this summary of a forthcoming bulletin, entitled "Full Employment Patterns: The Structure of the American Economy under Full Employment Conditions," was published in the February 1947 issue of the Monthly Labor Review.

[2] See February 1947 Monthly Labor Review, pp. 163–190.

full employment. This model is called the consumption model. The second model of a full employment economy is obtained by holding consumer demand and government demand at previously estimated levels, but augmenting the estimated level of investment demand by the amount necessary to yield full employment. This is called the investment model.

Neither of these models is in fact likely to be realized. If full employment is achieved in 1950, it is likely to be as a result of increases in all forms of demand. The two models thus provide extremes; a real full employment situation is likely to occupy an intermediate position.

INCREASED CONSUMER DEMAND

If we refer back to table 11,[3] we note that the 1950 consumer demand of 89.8 billion dollars generated 23.4 million jobs. Each 4 billion dollars' worth of consumer demand resulted in about 1 million jobs. To create 4.7 million additional jobs solely by an increase in consumer demand, it would consequently be necessary to raise this demand by about 19 billion dollars or 20 percent. This calculation, although only approximate, nevertheless provides an indication of the magnitudes involved.

A 20-percent increase in the level of consumer demand for a fixed level of national income is a very sharp increase indeed. It is in excess of the increase in expenditure occasioned by the shift in expenditure patterns between 1901 and 1917–19 and again between 1917–19 and 1935–36 (chart 3).[4] There are only three general methods by which an increase of this magnitude might conceivably occur. The first is an upward shift in the volume of consumer expenditure relative to income, the second a shift toward more equality in the distribution of income, and the third an increase in government transfer payments without an equivalent increase in taxes. The last, involving budget deficits, is clearly a matter of public policy and will not be considered here. The effects of a redistribution of income on the aggregate level of consumer expenditure have been considered and appear to be neither as pronounced nor as simple as is sometimes assumed.

(XV) *For present purposes we have assumed an increase in the level of expenditure relative to income.* The magnitude of the increase involved is perhaps best indicated by the fact that for urban families the "break even" point (the point at which income and expenditures are equal) would have to rise from about the $1,250 prevailing in 1941 to more than $3,500. In periods of rapid and drastic change, increases

[3] See February 1947 Monthly Labor Review for tables 1 to 11.
[4] Idem, p. 180.

of this magnitude are possible. Thus, real consumer expenditure increased almost 20 percent from the second quarter of 1945 to the first quarter of 1946, even though real disposable income remained substantially unchanged. As a matter of fact, consumer expenditure in the first quarter of 1946 was already 7 percent higher than it would have been had the 1941 income-expenditure pattern held. As consumer durables become abundant it is likely that expenditure will continue to rise relative to income.

The changes in consumer expenditure wrought by the war are clearly abnormal, however, and provide an uncertain guide to 1950. A permanent increase in the level of demand must be made of more lasting stuff than a temporary shortage of consumer goods. In the absence of any clear knowledge of how a permanent upward shift might occur, it is impossible to prepare even roughly accurate estimates of how the necessary increases in consumer expenditure might be distributed among the different industries. If the upward shift is caused by the introduction of a limited number of basic new products, the bulk of the increase might be absorbed by them, with expenditure for other products remaining at levels implied by the 1941 pattern of expenditure. At the other extreme, it is conceivable that demand for the products of each industry might increase by the same percentage amount. Neither of these is a very likely hypothesis. (XVI) *The actual procedure used assumed that the over-all increase of 20 percent in expenditures would be distributed among the products of the different industries in the same fashion as if the 20-percent increase had been caused by an increase in income.* This assumption results in less than average increases for products like food and more than average increases for products like motor vehicles.

Table 12 shows full employment levels of consumer demand for the products of each industry derived on this basis. The over-all increase in real demand over 1939 is almost 80 percent. It exceeds the record volume of consumer demand in the first quarter of 1946 by almost 20 percent. All industries share in this increase, although not to the same extent. Consumer demand for agricultural products increases by a third, demand for motor vehicles almost triples. Demand for the products of all industries producing durable goods increases over 1939 by 123 percent, for those producing nondurables by 72 percent, for those producing services by 79 percent.

This increase in demand implies a level of living far higher than has ever been achieved before. It does not mean satiety, however. The fact that 7½ million consumer units would still receive incomes of less than $1,500 (table 3) is testimony to the magnitude of unfilled needs that would exist even at this level of demand.

TABLE 12.—*Consumer demand, by industry, 1939 and estimated 1950*[1]

Industry	1939, actual	1950, estimated if—			
		1941 expenditure habits prevail	Full employment is to be achieved solely by an increase in consumption		
	Millions of 1939 dollars			Percent increase over—	
				1939	Expenditures implied by 1941 pattern
Total consumer demand	$60, 279	$89, 834	$108, 106	79	20
Agriculture and fishing	3, 103	3, 799	4, 196	35	10
Food processing (including tobacco and alcohol)	10, 491	14, 888	16, 917	61	14
Ferrous metals	1	2	2	100	0
Shipbuilding	11	28	46	318	64
Agricultural machinery	12	21	25	108	19
Engines and turbines	10	18	19	90	6
Motor vehicles	1, 237	2, 536	3, 479	181	37
Transporation equipment, not elsewhere classified	31	65	94	203	45
Industrial and heating equipment, not elsewhere classified	192	248	261	36	5
Merchandising and service machines	81	113	124	53	10
Electrical equipment, not elsewhere classified	547	829	971	78	17
Iron and steel, not elsewhere classified	50	89	109	118	22
Nonferrous metals and their products	35	49	66	89	35
Nonmetallic minerals and their products	126	214	305	142	43
Petroleum production and refining	1, 918	3, 000	4, 366	128	46
Coal mining and manufactured solid fuel	599	782	957	60	22
Manufactured gas and electric power	1, 043	1, 742	2, 210	112	27
Communications	547	814	1, 160	112	43
Chemicals	985	1, 466	1, 671	70	14
Furniture and other manufactures of wood	586	831	994	70	20
Wood pulp and paper	128	182	250	95	37
Printing and publishing	609	907	1, 164	91	28
Textile-mill products	810	957	1, 110	37	16
Apparel and other finished textile products	3, 384	4, 896	6, 328	87	29
Leather and leather products	854	1, 143	1, 437	68	26
Rubber	223	312	407	83	30
All other manufacturing	697	1, 203	1, 591	128	32
Miscellaneous transportation	1, 130	1, 543	2, 464	118	60
Steam railroad transportation	689	1, 405	2, 149	212	53
Trade [1]	11, 291	17, 294	20, 431	81	18
Business and personal services	14, 707	21, 476	24, 159	64	12
Eating and drinking places	4, 152	6, 982	8, 644	108	24

[1] Expenditures are measured at producers' prices plus transportation costs. Trade margins, which are thus excluded, are entered as a purchase from trade.

INCREASED INVESTMENT DEMAND

Before estimating the levels of output required in each industry, we turn to an estimate of the increase in investment demand required to eliminate the employment gap. Proceeding as before, we note that the final demand for construction, producers' durable equipment, and exports as shown in table 11 was 31.2 billion dollars and generated 9.2 million jobs. Each 3.4 billion dollars' worth of demand created 1 million jobs. To create 4.7 million additional jobs would thus require 15 billion dollars of additional demand. The level of demand for capital

goods must consequently be increased to nearly 50 billion dollars, or about two and one-half times the 1939 level. If the investment model of full employment actually occurred, a larger proportion of the output of the private economy would be devoted to capital requirements than at any time since the Civil War. It is difficult to see how such a rate of capital accumulation could be maintained over any protracted period of time.

To estimate the composition of this new investment demand the following assumptions have been made. (XVII) *First, total construction activity has been increased by two-thirds, from the 15 billion dollars estimated previously to 25 billion dollars. Second, the demand for producers' durable equipment has been stepped up from the 9.5 billion dollars estimated previously to 14.7 billion dollars, an increase of well over half. Third, the volume of exports has been increased from 6.6 billion to 7.9 billion dollars, an increase of about one-fifth. The volume of exports of agricultural products and processed foods shown in table 10 has been retained; the exports of the other industries have been increased proportionately. Finally, the inventory change has been held constant.* A summary of these changes is given in table 13, and the distribution of all types of final demand by industry for both models in table 14.

With respect to construction, more than 4 billion dollars of the original demand was by government, and since this is being held constant, the increase given implies that private demand is doubled. Since the volume of imports remains unchanged, the increase in exports implies that the export surplus has increased to approximately 4 billion dollars. A surplus of this size could probably be achieved only by Federal action, and even in such a case could not easily be maintained indefinitely. At best, the investment model provides a picture of an economy at the peak of a capital goods boom.

TABLE 13.—*Investment demand, 1939 and estimated for 1950*

Item	1939, actual	1950, estimated—			
		Under previous assumptions	If full employment is to be realized solely by an increase in investment		
	Millions of 1939 dollars			Percent increase over—	
				1939	Previous estimates
Total investment demand	18,676	32,422	49,431	165	52
Producers' durable equipment	4,613	9,458	14,720	219	56
Construction	10,089	14,889	25,291	151	70
Merchandise exports	3,205	6,595	7,940	148	20
Inventory change	769	1,480	1,480	92	0

TABLE 14.—*Final demand, 1939 and estimated for 1950*

Industry	1939, actual	1950, estimated			
		Consumption model	Investment model	Percent change over 1939	
				Consumption model	Investment model
	Millions of 1939 dollars				
Total final demand	81,200	146,376	145,851	80	80
Agriculture and fishing	3,839	5,841	5,200	52	35
Food processing	10,777	17,860	15,496	66	44
Ferrous metals	180	349	430	94	139
Iron and steel foundry products	9	19	22	111	144
Shipbuilding	381	314	383	−18	1
Agricultural machinery	384	782	1,160	104	202
Engines and turbines	58	107	145	84	150
Motor vehicles	2,238	5,499	5,573	146	149
Aircraft	259	1,772	2,022	584	681
Transportation equipment, not elsewhere classified	206	442	605	115	194
Industrial and heating equipment, not elsewhere classified	1,244	2,375	3,433	91	176
Machine tools	361	724	1,058	101	193
Merchandising and service machines	276	521	707	89	156
Electrical equipment, not elsewhere classified	1,132	2,225	2,637	97	133
Iron and steel, not elsewhere classified	305	595	773	95	153
Nonferrous metals and their products	528	916	975	73	85
Nonmetallic minerals and their products	230	513	522	123	127
Petroleum production and refining	2,420	5,579	5,060	131	109
Coal mining and manufactured solid fuel	674	1,104	1,049	64	56
Manufactured gas and electric power	1,159	2,426	2,141	109	85
Communications	553	1,219	989	120	79
Chemicals	1,228	2,320	2,242	89	83
Lumber and timber products	50	100	129	100	159
Furniture and other manufactures of wood	811	1,491	1,596	84	97
Wood pulp and paper	196	356	396	82	102
Printing and publishing	731	1,291	1,124	77	54
Textile-mill products	959	1,438	1,411	50	47
Apparel and other finished textile products	3,450	6,670	5,598	93	62
Leather and leather products	912	1,565	1,393	72	53
Rubber	322	592	618	84	92
All other manufacturing	928	2,084	1,996	125	115
Construction	10,089	14,889	25,291	48	151
Miscellaneous transportation	1,231	2,758	2,392	124	94
Steam railroad transportation	789	2,442	2,024	210	157
Trade	12,411	22,840	20,790	84	68
Business and personal services	14,728	24,796	20,674	68	40
Unallocated	1,000	561	557	−44	−44
Eating and drinking places	4,152	8,999	7,240	117	74

The extremes of demand in each model represent fundamental changes in the structure of the economic system. Some type of change must occur, however, if full employment is to be achieved. The consumption model is a structural change at least part of which may occur spontaneously and maintain itself indefinitely. The investment model seems to offer little such possibility. The questions of public policy posed by these results must eventually be answered, even though the current high levels of production and employment may permit us to postpone a decision.

Full Employment Levels of Output

The high levels of final demand in both models mean increased demand for raw materials and semifabricated goods. The levels of output required in each industry by each of the two models are shown in table 15. The over-all increase in physical output is the same for both models, 82 percent over 1939. The impact of each on the separate industries is quite different, however. Thus, under the consumption model an increase in output of two-thirds is required of agriculture; under the investment model, one-half. On the other hand, the consumption model requires a twofold increase in the output of machine tools; the investment model a threefold increase. In general, industries producing nondurable goods and services are most affected under the consumption model, those producing durable goods, particularly

TABLE 15.—*Output by industry, 1939 and estimated for 1950*

Industry	1939 actual	1950, estimated			
		Consumption model	Investment model	Percent increase over 1939	
				Consumption model	Investment model
	Millions of 1939 dollars				
Agriculture and fishing	10,121	16,937	14,915	67	47
Food processing	13,258	22,685	19,263	71	45
Ferrous metals	2,593	4,824	5,927	86	129
Iron and steel foundry products	492	962	1,103	96	124
Shipbuilding	437	441	476	1	9
Agricultural machinery	439	893	1,276	103	191
Engines and turbines	134	233	286	74	113
Motor vehicles	2,581	6,157	6,255	139	142
Aircraft	269	2,030	2,269	655	743
Transportation equipment, not elsewhere classified	266	566	722	113	171
Industrial and heating equipment, not elsewhere classified	2,216	4,064	5,358	83	142
Machine tools	439	890	1,241	103	183
Merchandising and service machines	330	621	806	88	144
Electrical equipment, not elsewhere classified	1,829	3,499	4,146	91	127
Iron and steel, not elsewhere classified	2,283	4,066	4,952	78	117
Nonferrous metals and their products	1,568	3,124	3,473	99	121
Nonmetallic minerals and their products	2,065	3,522	4,748	71	130
Petroleum production and refining	4,852	10,067	9,593	107	98
Coal mining and manufactured solid fuel	1,730	3,015	3,055	74	77
Manufactured gas and electric power	2,864	5,539	5,233	93	83
Communications	1,516	2,713	2,484	79	64
Chemicals	3,401	6,411	6,635	89	95
Lumber and timber products	1,238	2,022	2,791	63	125
Furniture and other wood manufactures	1,187	2,154	2,281	81	92
Wood pulp and paper	1,707	3,036	2,914	78	71
Printing and publishing	2,265	3,962	3,468	75	53
Textile-mill products	3,159	5,743	5,199	82	65
Apparel and other finished textile products	3,453	6,742	5,645	95	63
Leather and leather products	986	1,667	1,436	69	46
Rubber	892	1,725	1,744	93	96
All other manufacturing	1,664	3,432	3,217	106	93
Construction	10,089	14,889	25,291	48	151
Miscellaneous transportation	3,167	6,448	6,001	104	89
Steam railroad transportation	4,310	8,739	8,563	103	99
Trade	16,571	30,088	28,189	82	70
Business and personal services	18,525	32,240	27,424	74	48
Eating and drinking places	4,152	8,999	7,240	117	74

metal goods, under the investment model. Industries supplying the basic goods and services required for high levels of production are affected in the same fashion in either case. The volume of railroad transportation, of electric power, of pulp and paper, of petroleum, and of coal is much the same under both models.

The magnitude of the levels of output required in 1950 for full employment is further indicated by estimates presented in table 16. An attempt has been made there to estimate the required output in physical units for a series of commodities under both models and to compare this output with the peak output previously attained. The estimates are necessarily rough since questions of "product mix" and "upgrading" are involved in proceeding from an index of output to physical units.

The qualitative conclusions that can be drawn from the estimates are probably unaffected, however, by the approximate nature of the results. We must exceed our previous peak of production for all but one commodity in the table, for both models. This is true not only for predominantly consumer commodities whose output was restricted during the war—shoes, tires, motor vehicles, and paperboard—but also for those commodities commonly regarded as the sinews of war. We must exceed the wartime peaks for coal, petroleum, kilowatt hours, and for steel, as well.

TABLE 16.—*Physical output of selected commodities, 1939, estimated for 1950, and year of peak production*[1]

Commodity	1939 output	1950 estimated		Peak output	Year of peak output, 1919 to 1945
		Consumption model	Investment model		
Tractors.....thousands	218	445	635	359	1941
Trucks, passenger cars.....millions	3.6	8.5	8.7	5.4	1929
Crude petroleum.....billions of barrels	1.3	2.6	2.5	1.7	1945
Steel ingots.....millions of short tons	52.5	97.7	120.1	89.2	1944
Cement.....millions of barrels	125	186	310	185	1942
Revenue freight ton-miles.....billions of miles	335	602	627	741	1944
Bituminous coal and lignite.....millions of short tons	395	688	697	620	1944
Kilowatt-hours.....billions	130	252	238	231	1944
Paper and paperboard.....millions of short tons	13.5	24.0	23.1	17.1	1941
Leather.....millions of hides and skins	116	196	169	139	1941
Shoes.....millions of pairs	424	714	608	498	1941
Tires.....millions of tires	57.6	111.4	112.6	68.7	1929
Bricks.....billions of bricks	4.8	7.3	11.9	10.6	1925
Lumber.....billions of board feet	28.6	46.7	64.4	41.0	1923 and 1925

[1] No one of these estimates is intended to be precise. The development of new products or of new patterns of requirements could alter consumer and business demand in ways that cannot be foreseen. To some extent, consumers in 1950 might prefer a smaller number of items of higher quality rather than a larger quantity with prewar quality. The table should be interpreted as showing that, independent of these developments, demand for many basic commodities and services is likely to be equal to or in excess of previous production peaks.

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The necessary levels of output for most commodities raise serious questions as to capacity. A necessary production of 97 million tons of ingot steel is not only higher than past peak output; it is above past peak capacity. The volume of automobile and truck registrations implied by the present results may require far more in the way of highways and urban parking areas than is likely to be available. Although there is probably sufficient capacity to process the 64 billion board feet of lumber required in the investment model, sustained cuttings at this rate would probably deplete our forests very rapidly. A similar problem occurs in the case of petroleum. It seems probable that if full employment is to be achieved in 1950 with the present assumptions, a very substantial volume of capital formation may be required in the coming years simply to provide the necessary capacity.

Employment, by Industry

Table 17 shows the level of employment to be expected in the various industries for each of the two models and compares it with conditions prevailing in 1939, 1941, 1944, and 1945. For both models the level of manufacturing employment is in the neighborhood of 15 million, approximately the 1945 level. For the different segments of manufacturing, however, the differences between the two models, or between either model and 1945, are marked. Despite the high level of manufacturing employment in 1941, it must be exceeded by almost 2 million in 1950. Only for industries like chemicals and electrical machinery, a considerable part of whose output consisted of war goods even in 1941, are the required levels of employment lower.

Outside of manufacturing, perhaps the most pronounced increase in employment occurs in trade. In contrast to the approximately 7 million employees required during the war, more than 10 million would be needed for the consumption model and 9.5 million for the investment model, despite an assumed increase of 19 percent in retail sales per employee over 1939 (table 1).

Employment in trade, finance, services, and miscellaneous together is 6 million above the 1939 level for the consumption model and 4 million for the investment model. These industries account for 43 percent of private nonagricultural employment in the consumption model and for 38 percent in the investment model. These figures compare with 33 percent in 1944, 41 percent in 1939, and 37 percent in 1929. The importance of these noncommodity industries as a source of employment may consequently be much the same under full employment conditions as it was in prewar years.

TABLE 17.—*Employees in nonagricultural establishments, 1950 estimated, 1945, 1944, 1941, and 1939*

[Thousands of persons]

Industry	1950, estimated		1945	1944	1941	1939
	Consumption model	Investment model				
Total, employees in nonagricultural establishments [1]	44,100	44,100	38,140	39,690	35,670	30,350
Manufacturing	14,840	15,220	15,060	17,110	12,970	10,080
Salaried workers	2,520	2,560	2,810	2,980	2,150	1,890
Wage earners	12,320	12,660	12,250	14,130	10,820	8,190
Iron and steel and their products	1,420	1,740	1,520	1,730	1,430	990
Electrical machinery	360	430	620	760	450	260
Machinery, except electrical	730	980	1,080	1,250	870	530
Transportation equipment, other than automobiles	280	320	1,450	2,390	600	160
Automobiles	820	840	590	730	570	400
Nonferrous metals and their products	390	420	380	440	340	230
Lumber and timber basic products	570	790	510	520	540	420
Furniture and finished lumber products	500	540	330	350	390	330
Stone, clay, and glass products	400	540	320	330	370	290
Textile-mill products and other fiber manufactures	1,730	1,540	1,080	1,130	1,280	1,140
Apparel and other finished textile products	1,280	1,070	920	930	910	790
Leather and leather products	480	410	320	320	380	350
Food	1,240	1,070	1,070	1,090	940	860
Tobacco manufactures	110	100	80	80	90	90
Paper and allied products	370	340	320	320	310	260
Printing, publishing, and allied industries	460	400	330	330	340	330
Chemicals and allied products	370	390	610	660	420	290
Products of petroleum and coal	160	160	140	130	120	110
Rubber products	200	210	200	200	160	120
Miscellaneous industries	430	390	390	420	320	240
Mining	1,100	1,150	780	840	950	840
Metal	180	210	----------	110	130	100
Bituminous coal	460	470	----------	390	440	390
Anthracite	90	80	----------	70	90	90
Quarrying	100	140	----------	80	90	80
Petroleum	270	260	----------	190	200	190
Transportation and public utilities	4,120	3,890	3,820	3,760	3,250	2,910
Railroads	1,640	1,600	----------	1,660	1,320	1,150
All other transportation	1,370	1,260	----------	1,240	1,020	930
Public utilities	1,110	1,030	----------	860	910	830
Trade	10,380	9,490	7,170	7,040	7,380	6,620
Finance, services, and miscellaneous	6,290	5,350	4,590	4,350	4,440	4,160
Construction	2,360	4,010	830	680	2,240	1,750
Government	5,000	5,000	5,890	5,910	4,450	3,990

[1] Totals may not add because of rounding.

Implications of Results

Perhaps the first conclusion to be drawn from the present results is that the maintenance of full employment will involve the preservation of a delicate balance between inflationary and deflationary forces. The deflationary forces, which tend to depress the level of employment, production, and prices, were summarized in the section on the deficiency in demand. They arise from the fact that under full employment conditions consumers and business might attempt to save more than could profitably be invested, and that under such circumstances income

tends to fall until the two become equal. This is a danger that has been thoroughly explored and is well understood.

The contrary and less generally explored inflationary forces arise essentially from potential shortages in capacity. The estimates in tables 15 and 16 suggest the high level of production required to meet a full employment level of demand, while experience since the end of the war indicates the pressures on prices that may build up when the production is not forthcoming.

To some extent any period characterized by high levels of income and demand will witness the development of inflationary pressures. The postwar years, however, may be unique in this respect. The last year of full peacetime production in the United States was 1929. For 15 subsequent years civilian production was depressed and the basic capacity of American industry expanded only moderately. On the other hand, the long-term factors determining the required expansion in capacity—the growth in the labor force and increases in labor productivity—continued unabated. All during this period a basic disparity, largely unnoticed, was developing between capacity to produce and full employment levels of production. This disparity is, of course, intensified by the above-normal levels of demand that wartime shortages have generated. The expansion in capacity that might normally have required a decade to achieve must now be made up in a few years if those levels of demand are to be satisfied. Until this occurs the pressure of a high level of demand on an insufficient volume of production will generate strong inflationary pressures. The great danger of these pressures arises not merely from the price increases they generate but also from the disbalances which are in turn generated by the price increases. Inventories rise relative to sales, profits relative to wages and salaries; speculative anticipation accentuates the pattern. The disbalances pile up until the required readjustment, long overdue, takes the form of a sharp drop in economic activity. This is the classic pattern of a boom and bust.

The potential shortage of capacity contains a promise as well as a threat, however. If the disruptive effects of inflationary pressures can be avoided, a potential shortage of capacity can lay the groundwork for many years of high production and employment. A shortage of homes and of commercial facilities, as well as of basic industrial capacity, could generate a boom comparable to that of the twenties in both duration and intensity. Under such circumstances high levels of production and employment would be possible even if consumer expenditure rose by considerably less than that required by the consumption model. To the extent that shortages in capacity do result in disbalances and recessions, the strength of the underlying factors

may be sufficient to prevent such recessions from being very deep or very prolonged.

A second basic conclusion suggested by the results is the feasibility of reductions in the length of the workweek if full employment levels of production are in fact attained. The abundance of goods and services that would be available under such circumstances would assure a level of living for the American people far above that ever before enjoyed. Past experience indicates, however, that most people have always preferred to take part of their increased productive ability in the form of more leisure rather than more goods. For a good part of the nineteenth century the common workday was 12 hours; before the First World War a 60-hour workweek prevailed in many industries; by 1939 the average workweek in all manufacturing was less than 40 hours. Continued advances in productive ability may provide the basis for a continuation of this tendency.

To the extent that the capacity of an industry depends on the number of man-hours worked, a reduction in working hours might aggravate potential inflationary pressures in the next few years. Even in these cases, however, real demand might be reduced in approximately the same proportion as capacity. And in those cases in which the pressure of demand is not so much on capacity as on basic resources—lumber and petroleum, for example—a reduced working week would lessen rather than aggravate inflationary pressures.

A third basic result is the conclusion to be drawn from the results in table 17, that the importance of the noncommodity-producing industries as a source of employment may be much the same under full employment conditions as in prewar years. This conclusion is in sharp contrast to the widely held belief that full employment can be attained only by means of a substantial increase in the importance of noncommodity-producing industries. There is no doubt that many of the pressures of demand on capacity and resources would be diminished if demand for services were higher than the present results indicate, and demand for commodities were in consequence lower. It is by no means impossible that spectacular developments in the field of new services, not allowed for in the present estimates, might initiate a fundamental change in consumer spending that would result in substantially increasing the relative importance of the service industries. It is unlikely, however, that a change of this type, even if it does occur, could gather any considerable momentum by 1950. Even more important, such a change would constitute a sharp reversal of past trends. The percentage of nonfarm employment in the service industries has been declining since 1870.[6] Even if we exclude domestic serv-

[6] Edward F. Dennison, Service Industries—Trends and Prospects, in Survey of Current Business, January 1945.

ice occupations, the service industries were no more important a source of relative employment in 1930 or 1940 than they had been in 1900.

Most of the factors usually cited to account for increasing service employment might as easily result in increased employment in commodity-producing industries. Increased leisure, for example, has resulted in heavier attendance at spectator sports and places of entertainment, but it has also resulted in increased demand for such commodities as cameras, radios, and automobiles. While a substantial shift of demand from commodities to services would relieve the pressure of a full employment demand on available supply, there is no firm basis in the past experience of the economy for expecting it.

Perhaps more important than any of these conclusions, however, is the fact that the results indicate that full employment will involve a diffusion of benefits to all groups in the economy. If it is achieved, we can have both a high level of profits after taxes and a high level of wage and salary payments, with no increase in prices above present levels. Similarly, Federal, State, and local governments can supply the prewar level of government services and make those additional expenditures which are a necessary aftermath of the war without departing from prewar tax rates. Or, if the American people decide to expand the welfare functions of their Government above the prewar level, it can be done without raising present tax rates. Nor are these benefits purely domestic in nature. The effects of high levels of domestic demand for imported goods on the stability of international commodity markets and on reversing the prewar trend towards national self-sufficiency should not be underestimated. A necessary condition for the progressive industrialization of the undeveloped countries of the world is a high level of international trade, which in turn cannot be attained in the absence of substantially full employment in this country.

While different groups in the country can have legitimate differences on how the problems involved in achieving full employment should be solved, there can be no basic difference of opinion on the value of the objective itself.

Developments in Brazilian Labor Organization Since VJ-Day [1]

Economic and Political Background

BRAZIL, extending from the foothills of the Andes to the Atlantic Ocean, occupies more than half of South America and is larger than continental United States. The Brazilian Ministry of Labor, Industry, and Commerce reported the number of employed workers in the country in 1944 as slightly more than 13 million.[2]

In 1940 about a quarter of those engaged in manufacturing, extractive industry,[3] commerce, finance, and transportation and communications (the industries in which workers are most likely to form labor organizations) were employed in the State of São Paulo. This State, together with the city of Rio de Janeiro and the adjoining Federal District, accounted for somewhat less than half of the total employed in the foregoing categories. It is in these areas that the labor movement of Brazil is most active.

Although industrialization made rapid strides in Brazil in the 1930's, in 1944 two-thirds of those gainfully employed were still engaged in agriculture, cattle raising, and rural industries.

Distribution of the total gainfully employed workers in Brazil in 1944 is as follows:

	Number	*Percent*
Industrial workers	1, 100, 000	8. 4
Commercial workers	600, 000	4. 6
Workers in transport and freight	165, 316	1. 3
Railroad workers	155, 853	1. 2
Workers in public utility concessions	116, 685	. 9
Maritime workers	54, 062	. 4
Bank employees	30, 492	. 2
Stevedores	25, 215	. 2
Miners	15, 865	. 1
Workers in air services and telecommunications	15, 605	. 1
Workers in agriculture, cattle-raising, and rural industries (estimated)	8, 860, 000	67. 9
Other (estimated)	1, 911, 000	14. 7
Total [1]	13, 050, 093	100. 0

[1] Data in this tabulation are from Boletim do Ministério do Trabalho Indústria e Comércio, No. 139, March 1946.

[1] Prepared by Jules Henry of the Bureau's Staff on Foreign Labor Conditions, under the direction of Faith M. Williams, Chief, on the basis of data from publications of the Brazilian Government, labor-union publications, and the Brazilian press.

[2] Data from the Brazilian Census of 1940 suggest that this figure represents workers above 18 years of age. This source places the total population over age 18 at 20,960,865. with 8,501,354 in domestic service (including both housewives and those employed in domestic service for pay). The Inter-American Institute of Statistics, on the basis of the Brazilian Census, places the number of gainfully occupied over 10 years of age in 1940 as 14,020,123.

[3] Includes mining and the extraction of rubber and other vegetable products.

The railways and other public utilities employ the largest units of workers. Some textile mills employ several thousand workers each, various metallurgical plants have around 2,500 each, and certain individual cement, glass, and beverage factories employ about 1,000 workers.[4]

Restrictions on immigration dating from 1931, the cutting-off of immigration from outside the hemisphere during World War II, the lack of skilled workers, and industrial expansion have made the staffing of industrial enterprises difficult in spite of extensive rural-urban migration. Postwar plans made for immigration to Brazil have not yet been fully put into effect.

Wages in Brazil are quite low as compared with the United States, and profits are usually higher. Despite the lack of over-all measurements of productivity in Brazil, as compared with this country, it is the general opinion that productivity is much lower there, largely because of obsolete machinery, lack of training both of plant managers and production workers, and the poor health of the latter—caused, for the most part, by poor nutrition, poor housing, and lack of proper sanitation.

Wages in Brazil are also less standardized than in the United States. Although collective agreements may exist within a plant or an industry, any applicant for a job must bargain with the employer on the basis of the legal minimum wage for the industry, regardless of his skill.

Government Controls Over Labor Organizations

Beginning with 1937, all labor organizations in Brazil were strictly regulated by the Government. Article 139 of the constitution of that year forebade strikes and lock-outs as "antisocial, harmful to labor and capital, and incompatible with the supreme interests of national production." Government regulation and control of the syndicates[5] extended to practically all details of syndical organization. Only those syndicates which were legally recognized and registered with the Ministry of Labor, Industry, and Commerce could defend the rights of workers.

Permission to hold elections and the choice of officers, on the part of the syndicates, were also subject to the approval of the Ministry; likewise the holding of meetings, for which the agenda had to be submitted in advance for approval. In addition, the chairman of the meeting was appointed by the Ministry, and no departure from the approved agenda was permitted. The Security Police had to be

[4] Industry in Latin America, by George Wythe (New York, Columbia University Press, 1945), p. 149.

[5] The term "syndicate," rather than "union," is used here because labor organizations in Brazil under the Vargas regime resembled certain types of European syndical organizations more closely than the trade-unions of the United States.

informed that the meeting was to be held so that a representative might attend. The subjects of a few specific petitions sent by syndicates to the Ministry in 1945 will indicate further the limitations placed by the Government on labor activity: (*a*) Raising dues; (*b*) extending the membership of a syndicate to a related category of workers; (*c*) permission to sell syndical property; and (*d*) permission to sell shares for the purchase of a building by a syndicate.

The number of syndicates in Brazil and their membership, from 1940 to 1944, are indicated in the following tabulation:

	1940	1944
Number of labor organizations:		
Workers' syndicates	1,205	[1] 762
Syndicates of liberal professions	129	68
National federations of workers		16
Membership:		
Workers' syndicates	327,957	480,000
Syndicates of liberal professions	8,224	[2]

[1] The decline in the number of syndicates is due to changes in the base of syndical representation.
[2] Not available.

In spite of its opposition to free labor organizations the Vargas regime initiated minimum-wage legislation,[6] and embarked on an elaborate program of social services for workers. Getúlio Vargas, after 15 years as President of Brazil, was a popular figure among many workers when, by the coup d'état of October 29, 1945, he was removed from office and an interim regime was installed under President Linhares. The elections of December 2, 1945, brought General Dutra to the presidency.

During the period from August 1939 to December 1945 increases in the cost of living had placed wage workers under tremendous strain, and there were many appeals against the existing wage scale. The official cost-of-living indexes for Rio de Janeiro and São Paulo showed increases of 85 and 136 percent, respectively. The Rio de Janeiro index is based on official price ceilings, and it is generally granted that there was extensive black-market trading in the city because of wartime shortages, which were great even in basic foods. The advance in living costs is frequently estimated at even more than the 136 percent shown by the São Paulo index. Large numbers of wage cases clogged the labor courts, so that despite increases in the minimum wage and the illegality of the strike, sporadic strikes and slowdowns occurred in 1944 and early 1945. Unrest even began to affect the Security Police.

Strike leadership was "invisible," as the assumption of such a role was a crime punishable by heavy penalties. The workers elected their own negotiating committees, who dealt directly with employers

[6] Decree Law No. 2162, January 5, 1940.

instead of going through the tedious process of the labor tribunals. In spite of the extralegal character of these procedures, in most cases the Vargas regime refrained from imposing penalties.

During this period, labor progressed slowly—and not always in a straight line—toward greater freedom. The pressure of economic forces made it inexpedient to keep the syndicates strictly within the limits of existing legislation, and approaching national presidential elections apparently suggested the advisability of liberalizing administration attitudes toward labor. Decree law No. 7,321[7] repealed decree law No. 5821, which had made it necessary to obtain approval from the Ministry of Labor before the initiation of a collective dispute. Under the new arrangement, syndicates could initiate such disputes on approval of two-thirds of the membership; or, where no syndicate existed, by agreement of one-third of the employees in any enterprise. In March 1945, syndicates were relieved of the necessity of having members of the Security Police present at their meetings. At the same time, censorship of the press was relaxed, only to be tightened again in April 1945, when the growing wave of strikes caused the Government to censor strike news.

As the economic pressure on wages increased and the Government became more lenient in its attitude toward strikes and other "incidents," and as the rank-and-file tendency to seek solution in strike action became more general, members of syndicates began to desert their leaders. This is easily understood, considering the very conservative character of these heads, who had been appointed, as previously noted, with the consent of the Ministry of Labor, Industry, and Commerce. Although labor leaders frequently opposed strikes, they were overruled by workers' committees. For instance, in April 1945 a group of unorganized workers in Santos was successful in calling a strike that included organized workers and in completely tying up the docks. The Brazilian Government does not publish strike statistics, but in the first 4 months of 1945 several hundred strikes at individual plants were reported in the Brazilian press. Practically all of them were for higher pay—generally for a 30 to 40 percent increase—and represented pent-up discontent with existing wage levels. In most cases, the workers obtained the wage demanded or a slightly lower rate.

In many of the negotiations leading to settlements, not only was the judicial machinery for labor adjustment ignored, but the employers themselves were relegated to the background, and the local prefect (equivalent to a mayor in the United States), a representative of the National or State Ministry of Labor, and sometimes a representative of some other Federal Ministry, such as Public Works or Transportation, negotiated with the workers.

[7] Published in the Diário Oficial of February 16, 1945.

The combination of high prices, food shortages, and labor unrest resulted in a strong feeling of tension. Most of the large wholesalers in the city of São Paulo are reported to have taken out riot insurance in mid-1945. In May the Federated Industries of São Paulo reported 365 strikes in 1 week, although more conservative sources placed the number at only 145.

The Workers' Unification Movement (MUT)

In this atmosphere of uncertainty, rising tension, and relaxation of strict Government controls, three events of major importance in Brazilian labor history occurred: the launching of the Workers' Unification Movement (*Movimento Unificador dos Trabalhadores*—MUT) April 1945, the general amnesty granted political prisoners resulting in the release from prison of Luis Carlos Prestes (April 1945), Communist leader imprisoned under the Vargas Regime, and the starting of the Tribuna Popular (May 23), a daily newspaper dedicated to presenting Prestes' views to the workers. There is no information about the distribution of the rank-and-file membership of the MUT among the various Brazilian political parties. However, the MUT program has received support from a number of labor groups.

From its establishment in April 1945 to the formation of the Brazilian Workers' Confederation (*Confederação dos Trabalhadores do Brazil*—CTB) in September 1946, the MUT largely dominated the progress of Brazilian labor toward its goals. Formally declared illegal by a Federal judge in April 1946, the MUT nevertheless continued to function extralegally (as it always, in fact, had done) until the establishment of the CTB was achieved.

The MUT was the product of the situation in which Brazilian labor found itself at the time: here was an essentially inexperienced labor movement, which had existed for years under strict Government control, now feeling a gradual relaxation of this restraint at a time when there was great economic pressure for strong labor action.

The basic labor program of the MUT was as follows:

1. Freedom of syndicates from Government control.
2. Establishment of a general federation of Brazilian workers. (Under Brazilian law at the time the only type of labor confederation specifically permitted was one embracing only one industry or profession. No such federation existed, however, on a national scale.)
3. Restoration of the right to strike.
4. Affiliation of Brazilian labor with the Confederation of Latin American Workers (CTAL) and the World Federation of Trade Unions (WFTU). (Such affiliation was forbidden by Brazilian law at the time.)

The MUT did not intend to remain a permanent labor organization. Its purpose was to achieve the program just outlined and then

to dissolve. Its method was to work through existing syndicates, not only to organize a national labor body but also to assist the workers in obtaining higher wages and better working conditions. In August 1945 this organization named two delegates to the Paris meeting of the WFTU.

The MUT made rapid progress within the labor movement at home. As the eve of the coup that unseated President Vargas approached, MUT workers more often headed the committees which, independently of the old syndicate directorates, negotiated with Government and management in the numerous wage actions that accompanied the soaring cost of living.

It is significant that just before the coup of October 29, President Vargas signed two decree laws [8] which embodied many of the objectives of the MUT. These laws included:

1. Eligibility of syndical officers for reelection.
2. Limitation on the powers of the Ministry of Labor, Industry, and Commerce in designating the chairman of syndical election meetings.
3. Permission to newly elected syndical officers to take office without previous approval of the Ministry of Labor, Industry, and Commerce, except in contested elections.
4. Limitations on causes for annulment of syndical charters.

Thus, between February and October 1945, labor in Brazil made the following gains:

1. Increased autonomy of syndicates over their own meetings and elections.
2. Experience in collective bargaining.
3. The de facto right to strike.
4. Establishment of a national organization dedicated to the advancement of labor.

Labor Under the Dutra Regime

The Dutra regime took office February 2, 1946. At first the attitude of the new Government appeared favorable to the labor groups. Octacilio Negrão de Lima, the Minister of Labor, Industry, and Commerce, publicly supported the right to strike and a greater measure of syndical freedom. Early in 1946, the strike weapon began to be used more widely as a device for bringing wages into line with the cost of living. Article 139 of the constitution of 1937 became a dead letter. As additional support of their position, the workers claimed that the "right to strike clause" of the Act of Chapultepec (adopted at the Inter-American Conference on Problems of War and Peace in March 1945) was superior to any purely local legislation. Strike votes, which would have been taken extralegally under the Linhares

[8] No. 8079, published in the Diário Oficial of October 11, 1945, and No. 8080, published October 13.

regime, were being taken in open syndicate meetings, and it became possible to fix responsibility for such work stoppages. By the middle of February 1946, however, the attitude of the Government had changed radically: striking workers and MUT leaders were arrested and held incommunicado, and new antistrike legislation was promulgated.[9]

In the case of the coal strike in the Butía and Arroio dos Ratos coal mines in the State of Rio Grande do Sul, President Dutra signed a decree law, on February 14, 1946, placing the mines under a military administrator. Troops took them over, and the miners were threatened with dismissal if they did not return to work. On February 28, Captain Ebenezer Cabral de Mello, the mine administrator, denied that the right to strike existed in Brazil, saying that the "right to strike" clause of the Act of Chapultepec did not apply to the country because the act was signed with reservations as to the clause in question by the Brazilian delegates.

A court decision of April 10, 1946, declared the MUT illegal. In May the regional offices of the MUT were compelled to close. In April there were only two strikes, but in Santos more than 40 stevedores were arrested in connection with their refusal to load Spanish ships—an action which was ascribed to Communist influence.

The celebration that the workers had planned for May 1, 1946, was prohibited by the police. In this connection, the police raided a MUT meeting on April 29, took the president and secretary to headquarters, and confiscated the organization's files.

Soldiers, marines, and highway workers were brought in to work the ships in Santos in connection with a strike on May 27 and 28. During the Sorocabana Railway strike at the end of May, several organizers were arrested. During June and July the Government continued the use of such measures, and decree law No. 9502 of July 24 placed new restrictions on syndicates.

Congress of Brazilian Workers

In spite of the unpropitious atmosphere, the MUT continued to operate much as before. In July 1946 the more "independent" elements in the Brazilian labor movement announced that a national syndical congress would be held in August for the purpose of organizing a nationwide general confederation of Brazilian workers. The Government's device in this case was to announce its own congress under the direct sponsorship of the Ministry of Labor, Industry, and Commerce. The independents then proposed to the Ministry that

[9] Decree Law No. 9070, published in the Diário Oficial of March 16, 1946.

the two congresses be amalgamated, and this was done through an understanding between the independents and the syndical organizing committee sponsored by the Ministry.

The First National Syndical Congress was held in Rio de Janeiro, on September 11, 1946, with the full consent and support of the Government. It was attended by between 1,500 and 2,000 delegates, representing over 800 syndical groups from all over Brazil, and was practically free from direct Government control.

Indirect domination was expected through those syndical leaders close to the Ministry. The schism that existed between these delegates and the independents and their close followers—who constituted the great majority of the delegates—ultimately resulted in disruption of the congress, when a Government minority of about 200 left the floor. The Minister of Labor, Industry, and Commerce then declared the congress adjourned; but the independents remained in session, and finished their business. They passed a series of resolutions embodying what had always been the basic MUT objectives, declared the formation of the Confederation of Brazilian Workers (*Confederação dos Trabalhadores do Brasil*—CTB), appointed a provisional executive committee, and went home.

The available evidence indicates that the congress was representative of the organized workers of Brazil, and that its resolutions accurately reflect the current aspirations of a substantial majority.

SELECTED RESOLUTIONS OF THE SYNDICAL CONGRESS [10]

I. *Free syndicates.*—Syndical organizations shall be permitted the right to formulate their own rules and regulations freely, and to manage their own affairs, including financial matters, without interference from the Government. All workers of any class or profession shall be given the right freely to organize.

II. *Organization basis.*—There shall be but one syndicate representing each category within any geographical unit; and the syndicates shall preferably be organized on an industrial basis.

IV. *Political activities.*—Political activities of members within the syndicate shall be prohibited, and any syndicate officer desiring to run for public office shall resign his post at least 90 days before the election.

V. *Collective agreements.*—Collective bargaining contracts shall be obligatory, and employers entering into such agreements will employ only union members. Collective agreements involving a majority of the employers within a given category shall automatically be extended

[10] Resoluções do Congresso Sindical dos Trabalhadores do Brasil. Editadas pela C. T. B. Jornal do Commercio. Rodrigues & C., Av. Rio Branco, 117, Rio de Janeiro, 1946.

to all employers in the same industry operating within the geographical jurisdiction of the syndicate involved.

VI. *The right to strike.*—There shall be no restriction on the right to strike, and no worker shall be punished by the employer for having participated in a strike.

VIII. *Profit sharing.*[11]—The right to share in profits implies the right to participate in management and to examine the books. Profit sharing should not be used as a device for cutting wages.

IX. *Hours of work.*—Eight hours shall constitute a day's work, with double time for overtime. The maximum for children and those engaged in hazardous or excessively fatiguing work shall be a 6-hour day. An 8-hour day, 44-hour week, is the maximum permitted workers in the merchant marine, with premium pay for overtime.

X. *Work injuries.*—Accidents and other forms of injury arising out of occupational hazards are defined in detail in the resolution. It also provides that the injured worker shall receive indemnity, be guaranteed all necessary care, get full wages, and share in profits; and in the event of death, his beneficiaries are to have an amount equal to at least 4 years' wages.

XII. *Industrial hygiene, women workers, etc.*—This resolution specifies in great detail the hygienic conditions that shall obtain in establishments, and specifies premium pay and reduction in hours for certain hazardous and arduous occupations. The resolution also calls for special facilities for female workers, for 16 weeks' paid maternity leave, and for the establishment of nurseries in enterprises employing women.

Minors.—This resolution limits daily hours of work to 6, calls for the establishment of technical schools for minors by the employers, provides for certain health and hygiene requirements, and stipulates that wages must be at least three-quarters of the pay of adults.

XIII. *Consumer and credit cooperatives.*—These shall receive certain privileges including tax exemptions, preferential freight rates, and Government aid.

XIV. *Absenteeism.*—This resolution deals with the causes of absenteeism and suggests methods for its reduction.

Causes are given as low wages; great work distances and inadequate transportation; inadequate food; rigidity of employers with regard to hours of arrival; exhaustion due to long hours; red tape in welfare services and lack of adequate medical and dental service at work places; absence of all comfort and sanitation on most jobs; lack of enforcement of safety laws; illness and other circumstances beyond the worker's control.

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[11] Article 157, clause IV, of the new constitution provides for the "compulsory and direct sharing of the worker in the profits of business" (see p. 443).

Prevention of absenteeism may be achieved through adequate wages; construction of workers' homes near places of work; proper transportation; a 15-minute tardy allowance without penalty, or an hour's allowance with penalty; limitation of work to 8 hours; elimination of red tape in welfare services; installation of medical and dental services in places employing more than 100 workers and cooperative arrangements in smaller establishments; enforcement of labor laws.

XV. *Vacations.*—This resolution stipulates the conditions that should govern vacations and vacation pay, and demands double pay during vacation periods.

XVI. *Medical care and social security.*—Under this head, the right to free medical and hospital care through social security and the broadening of benefits, 43 modifications and improvements in the existing system of social security benefits are proposed.

XVII. *Pension administration.*—This resolution calls for the administration of the Institute of Retirement and Pensions by a tripartite body consisting of representatives of labor, management, and Government, and for certain limitations in the items for which Institute funds may be expended.

XVIII and XIX. *Labor court representation.*—A tripartite form of representation is recommended for labor courts and conciliation services. Resolution No. XIX also calls for certain reforms in these agencies.

XX. *National Confederation of Labor.*—The Confederação dos Trabalhadores do Brasil [Confederation of Brazilian Workers]—CTB—is hereby created.

> The CTB will have as its executive body a national executive commission.
>
> The national council of representatives shall be composed of delegates elected within the nonfederated syndicates, within the State, interstate, and national federations affiliated with the CTB; and the number of delegates shall be proportional to the syndicates that these federations represent.
>
> In the States or municipalities where there are three or more syndicates, these shall form themselves into syndical unions.

Despite the Minister's determined opposition to the CTB its influence in the Brazilian labor movement grew rapidly. On October 16, 1946, Octacilio Negrão de Lima resigned as Minister of Labor, Industry, and Commerce, and was replaced by Morvan Figueiredo of the Brazilian Labor Party, in which Vargas is one of the leaders.

Labor Under the Constitution of September 1946 [12]

A new constitution for Brazil was adopted by the Constituent Assembly in September 1946. Articles 157, 158, and 159 are the most important for organized labor, and are as follows:

ARTICLE 157: Labor and social welfare legislation shall observe the following standards, in addition to others that have in view the improvement of the condition of the workers—

I.—A minimum wage capable of satisfying the normal necessities of the worker and his family, in accordance with the conditions in each region.

II.—Equal pay for equal work without regard to age, sex, nationality, or marital status.

III.—Wages for night work shall be higher than those for day work.

IV.—Compulsory and direct sharing of the worker in the profits of business, in terms and form to be determined by law.

V.—The workday not to exceed 8 hours, except in those cases covered by law.

VI.—One day (preferably Sunday) of paid rest each week; and, within the limitations of the requirements of the industries; this shall hold also for civil and religious holidays, in accordance with local tradition.

VII.—Paid annual vacations.

VIII.—Hygiene and safety at work.

IX.—Prohibition of the following: Employment of minors under 14 years of age; employment of women and of minors under 18 years in hazardous industries; night work in the case of minors under 18 years, taking account, however, in any given case, of the conditions established by law and the exceptions permitted by the judge concerned.

X.—Right of pregnant women to leave before and after delivery, without prejudice as to employment or wages.

XI.—Establishment of quotas of Brazilians in public utilities operated under concessions and in certain branches of commerce and industry.

XII.—Job security, whether in industry, commerce, or agriculture, and a dismissal wage for the discharged worker, in such cases and under such circumstances as the law shall determine.

XIII.—Recognition of collective labor agreements.

XIV.—Medical assistance, including hospitalization and preventive medicine for workers and for pregnant women.

XV.—Aid to the unemployed.

XVI.—Welfare benefits, through contributions by the State, the employer, and the employee, for maternity, illness, old age, and death.

XVII.—Compulsory occupational accident insurance to be carried by the employer.

ARTICLE 158: The right to strike is recognized, and this right will be regulated by law.

ARTICLE 159: Professional or syndical association shall be free, and the following shall be regulated by law: The manner in which [such associations] are constituted; their legal representation in collective agreements, and the exercise of functions delegated by the public power.[13]

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[12] Published in Diário Oficial, September 25, 1946.

[13] As to the actual position of labor under the new constitution, judging from the general character of the foregoing articles, much will depend on subsequent legislation and interpretation of the constitutional provisions by judicial decision.

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Wage and Hour Statistics

Union Wages and Hours in the Printing, Trucking, Local Transit, and Baking Industries, 1946[1]

NEGOTIATIONS, largely after VJ-day, resulted in increases in union hourly rates of pay ranging from 11 to 17 percent, in four widely differing industries—printing, trucking, local transit, and baking—between July 1, 1945, and July 1, 1946. Of those covered by the survey, from 86 percent of the total number of truck drivers to 98 percent of the workers in the printing trades registered rate increases. Weekly hours were reduced in the four industries; the maximum reduction (2.5 percent) occurred in the printing trades. Payment for overtime work was time and a half the regular rate, with few exceptions. At least four-fifths of the workers received vacations with pay.[2]

Union Hourly Rates of Pay

TREND OF UNION WAGE RATES

Postwar wage negotiations resulted in substantial rate increases for union workers in each of the industries studied. Average increases (17 percent) between July 1, 1945, and July 1, 1946, were largest in the printing trades and in the local transit industry (see table 1). For local transit workers the increases included previously effective bonuses that were incorporated in the basic rate structure after VJ-day. Bakery workers averaged almost a 15-percent rise, and truck drivers, 11 percent.

The post-VJ-day increases for the organized baking, trucking, and local transit workers were the highest recorded in any 1 year in the

[1] Prepared in the Bureau's Wage Analysis Branch by James P. Corkery and Herbert M. Abowitz under the direction of Donald H. Gerrish. Individual bulletins for the four industries, containing later information insofar as possible, will be published by the Bureau. Union scales in effect in each city (as shown in table 4) will be listed. A similar bulletin will be issued for union wages and hours in the building trades which were summarized in the January 1947 Review (p. 53).

[2] The July 1, 1946, survey is the latest in an annual series which began in 1907, when bakery, building, metal, and printing trades workers in 39 cities were covered. In 1946, the study extended to 75 cities ranging in size from 40,000 to over 1,000,000; the coverage was 105,831 workers in the printing trades, 64,228 in bakeries, 102,164 local transit operating employees, 218,579 motortruck drivers, and 31,465 truck drivers' helpers. Workers in municipally operated transit systems were included if their wage rates were negotiated by a local transit authority and an established trade-union in the field; otherwise government workers were excluded. Commission and mileage-rate drivers were excluded from the tabulations of rates for truck drivers.

history of the Bureau's index series for each of these industries (which were started in 1939, 1936, and 1929, respectively).[3] In printing (for which the series begins with 1907), the 1945–46 increase exceeded that for any pervious year since the period immediately following World War I. Between 1918 and 1919, rates for printing tradesmen advanced about 22 percent. The following year, this industry's index registered its most substantial improvement (28 percent). However, in money the average increase in 1946 was about 23 cents, and the two annual adjustments following World War I (recorded in 1919 and 1920) averaged about 11 and 18 cents, respectively.

TABLE 1.—*Indexes of union hourly wage rates in selected industries, 1936–46* [1]

Year	Indexes (1939=100) of hourly wage rates							
	Printing trades			Trucking			Local transit operating employees	Bakery workers
	All printing	Book and job	Newspaper	Drivers and helpers	Drivers	Helpers		
1936	92.9	93.0	92.8	88.5	[2]	[2]	92.1	[3]
1937	96.0	96.0	96.3	94.4	94.5	94.2	96.4	[3]
1938	99.1	99.2	98.8	97.8	97.9	97.5	99.2	[3]
1939	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1940	101.4	100.9	102.2	102.0	102.1	102.0	101.1	102.7
1941	102.6	102.0	103.6	106.1	105.9	107.0	104.8	106.1
1942	107.0	106.4	108.1	113.6	113.1	116.4	112.5	116.3
1943	110.4	109.3	112.6	119.8	119.2	123.0	119.8	121.2
1944	113.1	112.2	115.1	122.6	121.9	126.8	120.8	122.0
1945	114.6	113.7	116.7	125.2	124.5	129.8	122.1	123.6
1946	134.2	133.7	135.5	139.3	138.4	145.5	143.1	141.6

[1] The index numbers include rates for all covered occupations weighted by the number of union members at each job.
[2] Information not computed separately in 1936.
[3] Not available.

AVERAGE UNION HOURLY WAGE RATES, JULY 1, 1946 [4]

The average hourly wage rate on July 1, 1946 (see table 2), for union printing-trades workers in 75 cities was $1.58 an hour, followed by motortruck drivers ($1.13), local transit workers ($1.10) and bakery workers ($1.00).

[3] Local union officials furnished the scales of minimum wage rates and maximum scheduled hours in effect on July 1, 1946, to field representatives working out of the Bureau's regional offices. Rates above the negotiated minimum are frequently paid for long service, special qualifications, personal, or other reasons. Such premium rates were not used in the preparation of this report.

In computing the index series (1939=100), which indicates the trend of wage rates, the annual percentage change from year to year is derived from aggregates of union quotations for identical classifications in 2 successive years. The membership weights in both of the aggregates used for each year to year comparison are those reported for the second year. To obtain the index for the current year, the total of the current aggregates is divided by the previous year's aggregates and the ratio thus obtained is multiplied by the previous year's index number. The indexes are computed on this basis in order to minimize the effect of changes in union membership which might obscure the real changes in wages. The index series, rather than the actual averages of rates in this and previous reports, should be used to determine the trend of hourly wage rates. Changes in coverage and shifts in union membership distort a direct comparison of average rates in 2 periods.

[4] The averages appearing in this report were based on union rates weighted by the number of union members actually employed at each individual rate.

Almost half of the printing-trades workers had rates ranging from $1.50 to $1.90 an hour with as many as 13 percent receiving rates of $2.00 an hour or more. The only other workers in the industries studied who had comparably high scales were in the shops making Hebrew bakery products; more than 6 out of 10 of these workers had rates between $1.50 and $1.90, but none of them had rates as high as $2.00 an hour. Over four-fifths of the truck drivers had rates between 90 cents and $1.40 an hour. Among local transit employees 9 out of every 10 worked for rates ranging from 90 cents to $1.30 an hour.

TABLE 2.—*Percentage distribution of union members in selected industries by hourly rates, July 1, 1946*

Industry	Average rate per hour	Percent of union members whose rates (in cents) per hour were—								
		Under 60 cents	60 and under 70	70 and under 80	80 and under 90	90 and under 100	100 and under 110	110 and under 120	120 and under 130	130 and under 140
All printing trades	$1.584	0.1	0.8	4.7	3.7	2.1	1.0	2.9	2.9	7.0
Book and job	1.487	.1	1.2	6.9	5.5	3.1	1.3	3.8	3.6	8.3
Newspapers	1.786	------	------	(1)	(1)	.1	.5	1.1	1.3	4.4
Motortruck drivers and helpers	1.109	.3	1.2	3.8	6.7	15.9	20.2	18.1	15.1	11.9
Drivers	1.130	.2	.5	3.0	5.2	15.5	18.8	19.4	16.5	13.2
Helpers	.961	1.0	5.6	9.1	17.4	18.8	30.9	9.2	5.2	2.5
Local transit operating employees	1.102	------	(1)	.6	2.6	13.0	26.4	34.1	17.4	5.9
All bakery workers	1.001	4.4	9.2	17.1	10.9	14.3	14.1	8.3	4.6	4.8
Bread and cake, hand shops	1.242	.7	2.6	2.8	2.4	4.0	13.8	18.6	12.7	20.9
Bread and cake, machine shops	.935	2.7	6.5	19.1	13.9	20.9	18.8	8.5	3.9	1.9
Pie and pastry	.885	1.4	9.7	30.1	17.5	12.7	13.0	8.0	3.2	.1
Hebrew shops	1.649	.5	------	.2	.3	(1)	1.7	1.6	1.1	6.4
Other national baking	1.317	.7	.7	.1	.9	2.4	.7	9.6	24.7	27.9
Crackers and cookies	.751	15.0	27.7	27.8	11.4	8.0	6.2	3.0	.6	.1

Industry	Percent of union members whose rates (in cents) per hour were—									
	140 and under 150	150 and under 160	160 and under 170	170 and under 180	180 and under 190	190 and under 200	200 and under 210	210 and under 220	220 and under 230	230 and over
All printing trades	9.1	11.4	12.6	7.5	16.5	4.4	4.6	5.1	2.5	1.1
Book and job	9.9	11.2	12.5	4.3	17.9	3.4	2.2	2.6	1.8	.4
Newspapers	7.4	11.9	12.9	14.1	13.5	6.4	9.4	10.4	4.0	2.6
Motortruck drivers and helpers	4.2	1.9	.3	.3	.1	------	(1)	------	------	------
Drivers	4.8	2.2	.3	.3	.1	------	(1)	------	------	------
Helpers	.3	------	------	------	------	------	------	------	------	------
Local transit operating employees	(1)	------	------	------	------	------	------	------	------	------
All bakery workers	2.9	2.3	2.2	3.3	1.1	.5	------	------	------	------
Bread and cake, hand shops	7.1	1.6	4.3	6.7	------	1.8	------	------	------	------
Bread and cake, machine shops	2.4	1.2	.2	------	------	------	------	------	------	------
Pie and pastry	2.1	2.2	------	------	------	------	------	------	------	------
Hebrew shops	4.1	13.0	20.2	32.9	11.9	6.1	------	------	------	------
Other national baking	13.8	17.4	.4	.7	------	------	------	------	------	------
Crackers and cookies	.2	------	------	------	------	------	------	------	------	------

[1] Less than 0.05 of 1 percent.

For all bakery workers combined, rates were concentrated at considerably lower levels than for any of the industries previously discussed. The industry has a large volume of low-paid work, particularly in the wrapping, packing, and icing departments of large bakeries. Over half of the bakery workers had rates between 70 cents and $1.10 an hour. The rates for workers in bread and cake hand shops, in Hebrew shops (already mentioned), and in specialized shops producing French, Italian, Bohemian, or other "national" products were concentrated at higher levels. About two-thirds of the hand-shop workers had rates between $1.00 and $1.40, and over four-fifths of the workers in other specialized baking shops had rates between $1.20 and $1.60. Cracker and cooky shops paid the lowest wages: only 1 union member in 10 earned as much as $1.00 an hour.

The highest rates for printing-trades workers were those received by the photoengravers. Their averages of $2.06 in newspaper plants and $1.97 in other shops were well above those for other printing trades. The individual trade averages in baking ranged from a high average of $1.65 (Hebrew products) to a low of 75 cents (crackers and cookies). Individual rates for motortruck drivers ranged from a low of 50 cents to a maximum of $2.00 an hour; the $2.00 rate, however, covered very few workers and was effective only for drivers of large dump trucks in St. Louis. The highest rates for operating employees in the local transit industry were those paid in Detroit: after 1 year of service, operators of 1-man cars on regular runs were paid $1.32 an hour and those on owl runs $1.42.

CHANGES IN UNION WAGE RATES BETWEEN 1945 AND 1946

Practically all of the printing workers (98 percent), local transit (97 percent), bakery (93 percent) and motortruck drivers (86 percent) obtained wage increases between VJ-day and July 1, 1946 (see table 3). This was in sharp contrast to experience in the 1944–45 period when less than two-fifths of the truck drivers, about a third of the printing trades workers, and about a fifth of the bakery and local transit workers received raises in basic rates.

Not only were most of the workers recipients of wage increases, but the amounts were substantial. More than two-thirds of the union printing-trades workers received increases of 15 percent or more and about a sixth benefited from raises of 25 percent or over. Only 8 percent had raises of less than 10 percent. Six out of 10 local-transit operating employees received wage-rate increases ranging from 10 to 20 percent over rates in the previous year, and for an additional 3 of the 10 the increases exceeded 20 percent. About three-fourths of the truck drivers and over four-fifths of the bakery workers benefited from advances of 10 percent or more.

TABLE 3.—*Percent of union members affected by wage-rate changes in selected industries and percent of increase, July 1, 1946, compared with July 1, 1945*

Industry	Percent of union members affected		Percent of total members affected by increase of—							
	No change	Increase	Less than 5 percent	5 and under 10 percent	10 and under 15 percent	15 and under 20 percent	20 and under 25 percent	25 and under 30 percent	30 and under 35 percent	35 percent and over
All printing trades	2.0	98.0	0.7	7.2	19.4	36.5	18.8	9.5	4.8	1.1
Book and job	1.0	99.0	.8	6.2	17.7	42.3	15.2	10.5	4.8	1.5
Newspaper	4.1	95.9	.6	9.3	22.8	24.6	26.2	7.3	4.8	.3
Motortruck drivers and helpers	14.2	85.8	9.9	17.3	22.1	21.6	9.3	3.1	1.4	1.1
Drivers	14.0	86.0	10.5	16.8	22.2	22.8	8.9	2.8	1.2	.8
Helpers	16.0	84.0	5.7	20.8	20.3	14.1	11.9	5.3	2.6	3.3
Local transit operating employees	3.1	96.9	.9	2.8	23.1	39.6	16.6	12.6	1.3	(1)
All bakery workers	7.4	92.6	3.3	14.1	18.4	28.5	14.1	8.6	3.2	2.4
Bread and cake, hand	4.3	95.7	4.2	15.8	33.3	12.7	6.2	13.9	6.6	3.0
Bread and cake, machine	9.9	90.1	1.9	9.3	12.8	33.1	17.8	9.3	3.1	2.8
Pie and pastry	1.1	98.9	.7	12.4	17.1	33.1	16.1	9.9	2.8	6.8
Hebrew baking	------	100.0	10.5	51.0	18.3	13.8	4.4	.9	1.1	------
Other national baking	------	100.0	------	2.3	20.6	22.0	26.8	18.2	8.2	1.9
Crackers and cookies	6.6	93.4	5.1	14.1	26.3	31.0	10.1	4.5	1.3	1.0

[1] Less than 0.05 of 1 percent.

POSTSURVEY RATE CHANGES

Limited data available on postsurvey wage changes indicate that many rate increases became effective after July 1, 1946. Of particular significance were gains of about 40 cents an hour for book and job typographical workers in New York and Chicago—both important centers in the printing industry. Many other increases for union printing-trades workers ranged from 15 to more than 50 cents an hour in both the commercial and newspaper branches. Hourly increases were as high as 30 cents for truck drivers engaged in general intracity delivery service in New York and Chicago. The 30-cent hourly advance in New York City resulted from an increase of $7.40 a week in basic rates, coupled with a reduction in the workweek from 44 to 40 hours. Other increases reported for special commodity drivers (such as produce, armored cars, beverage, etc.) ranged from 10 to 36 cents an hour.

Increases for local transit workers were reported in several cities. Postsurvey gains of 5, 8, 13, and 24 cents were registered in Spokane, Scranton, Salt Lake City, and York, respectively.

Contracts negotiated prior to the survey date covering certain categories of New York City hand-shop bakery workers provided for automatic increases of 50 and 75 cents a day commencing in 1947. Peoria hand-shop workers received a $10 weekly raise (about 20 cents an hour). Hourly increases ranging from 5 to 18.5 cents an hour covering bakery workers in a few other cities were also reported.

CITY AND REGIONAL DIFFERENCES IN WAGE RATES

Wage rates for union workers in all four industries tended to increase progressively with size of city. For truck drivers and local transit workers, however, there was a small differential in favor of size V cities (40,000 to 100,000) over size IV cities (100,000 to 250,000).

Averages in the North and Pacific Region were generally higher than those for the South and Southwest for comparable city size groups. The only exception was in the smallest cities, where frequently group averages for the South and Southwest exceeded those for the North and Pacific.

New York and Chicago—both important centers in the printing industry—had the highest average rates in each of the respective branches (see table 4). New York workers led in the newspaper branch (an average of $2.06 an hour) and Chicago in the book and job branch ($1.72). Seattle, the strong center of teamster organization, had the highest average for truck drivers ($1.36 an hour). The New York City average was highest for bread and cake hand shops ($1.51) while Butte led in the machine-shop branch ($1.22 an hour). San Francisco had by far the best average for pie and pastry workers ($1.44) as well as the top average for cracker and cooky (99 cents). New York City had the highest average for Hebrew bakeries ($1.73) and Detroit was highest for other national baking ($1.43).

TABLE 4.—*Average union wage rates in selected industries, by city, July 1, 1946*

City	Average hourly rates in selected industries								
	Printing		Motor-truck drivers	Bakery workers					
	Book and job	Newspaper		Bread and cake		Pie and pastry	Hebrew	Other national bakeries	Crackers and cookies
				Hand	Machine				
Atlanta, Ga	$1.315	$1.563	$0.881	.....	$0.744	.....	.....	.....	$0.755
Baltimore, Md	1.270	1.647	.979	$0.832	.826	$0.722	.....	.....	.....
Binghamton, N. Y	1.188	1.427	.972	.....	.750	.....	.....	.....	.....
Birmingham, Ala	1.217	1.492	.883	.....	.722	.....	.....	.....	.590
Boston, Mass	1.324	1.836	1.135	.730	.809	.835	$1.584	.....	.736
Buffalo, N. Y	1.343	1.660	1.069	.....	.874	.705	.....	$1.227	.741
Butte, Mont	1.130	1.539	1.164	1.203	1.215	.....	.....	.....	.....
Charleston, S. C	1.438	1.492	.888	.....	.....	.....	.....	.....	.....
Charleston, W. Va	1.388	1.422	1.034	.....	.767	.....	.....	.....	.....
Charlotte, N. C	1.270	1.345	.831	.....	.712	.....	.....	.....	.....
Chicago, Ill	1.716	1.954	1.119	1.221	.913	.813	1.526	1.284	.782
Cincinnati, Ohio	1.420	1.853	1.035	1.281	.914	.....	.....	.....	.785
Cleveland, Ohio	1.418	1.895	1.164	1.097	1.021	.837	1.503	1.230	.700
Columbus, Ohio	1.430	1.703	1.061	.....	.899	.770	.....	.....	.620
Dallas, Tex	1.259	1.601	.879	.....	.874	.....	.....	.....	.....
Dayton, Ohio	1.438	1.597	1.048	.....	.939	.....	.....	.....	.798
Denver, Colo	1.317	1.567	.958	1.211	1.149	.....	1.168	.....	.686
Des Moines, Iowa	1.240	1.601	.913	.933	.965	.....	.....	.....	.751
Detroit, Mich	1.515	1.932	1.227	.....	.929	.896	1.606	1.425	.795
Duluth, Minn	1.132	1.395	.960	.872	1.008	.633	.....	.....	.911
El Paso, Tex	1.480	1.513	.910	.....	.802	.....	.....	.....	.....
Erie, Pa	1.332	1.508	.977	.....	.....	.....	.....	.....	.....
Grand Rapids, Mich	1.241	1.559	.984	.....	.929	.....	.....	.....	.....
Houston, Tex	1.345	1.510	.879	.817	.881	.....	.....	.....	.....

TABLE 4.—*Average union wage rates in selected industries, by city, July 1, 1946*—Con.

City	Average hourly rates in selected industries								
	Printing		Motor-truck drivers	Bakery workers					
				Bread and cake		Pie and pastry	Hebrew	Other national bakeries	Crackers and cookies
	Book and job	Newspaper		Hand	Machine				
Indianapolis, Ind	$1.363	$1.793	$0.924	$0.938	$0.879	$0.907			
Jackson, Miss	1.250	1.350	.755						
Jacksonville, Fla	1.317	1.703	.973		.748				
Kansas City, Mo	1.237	1.540	.987		.997				$0.748
Little Rock, Ark	1.071	1.364	.922		.836				
Los Angeles, Calif	1.551	1.709	1.245	1.046	1.181	.963	$1.715		.825
Louisville, Ky	1.158	1.616	.881		.910				.736
Madison, Wis	1.429	1.467	.969	1.041	.987				
Manchester, N. H	1.058	1.392	.842	.870					
Memphis, Tenn	1.095	1.531	.824		.854				.734
Milwaukee, Wis	1.312	1.755	1.053		.787		1.117		.658
Minneapolis, Minn	1.199	1.748	1.047	1.024	.928		1.192		.652
Mobile, Ala	1.063	1.516	.862						
Nashville, Tenn	1.023	1.372	.834		.703				.609
Newark, N. J	1.383	1.716	1.278	1.201	.878		1.520		
New Haven, Conn	1.291	1.368	1.018	1.052	.871		1.507		
New Orleans, La	1.235	1.361	.807		.875				
New York, N. Y	1.637	2.060	1.308	1.510	.987	.927	1.726	$1.374	.964
Norfolk, Va	1.430	1.411	.934		.727				
Oklahoma City, Okla	1.272	1.492	.930		.987				
Omaha, Nebr	1.368	1.577	.854		.858				
Peoria, Ill	1.315	1.499	1.086	.850	.989				.684
Philadelphia, Pa	1.451	1.526	1.031		.848	.839	1.560		.768
Phoenix, Ariz	1.365	1.457	1.191	.987					
Pittsburgh, Pa	1.368	1.707	1.101		.951		1.152		
Portland, Maine	1.007	1.347	.880						
Portland, Oreg	1.471	1.717	1.176	1.238	1.184				.643
Providence, R. I	1.307	1.732	.994	1.016	.895	.686	1.384		
Reading, Pa	1.284	1.538	.935		.887				
Richmond, Va	1.075	1.422	.811		.820				
Rochester, N. Y	1.317	1.594	.981	1.133	.974		1.596		.728
Rock Island (Ill.) district[1]	1.308	1.500	.877	.931	.722	.847			
St. Louis, Mo	1.300	1.862	1.018	1.094	.999		1.143		.765
St. Paul, Minn	1.067	1.736	1.044	.959	.936				.845
Salt Lake City, Utah	1.498	1.480	1.008	.961	.951				.633
San Antonio, Tex	1.076	1.448	.787						.848
San Francisco, Calif	1.530	1.879	1.322	1.328	1.193	1.440		1.364	.990
Scranton, Pa	1.158	1.646	.937	.738	.763				.647
Seattle, Wash	1.648	1.845	1.358		1.103				.860
South Bend, Ind	1.350	1.450	1.070	.864	.883				
Spokane, Wash	1.350	1.614	1.241		1.142				.746
Springfield, Mass	1.163	1.514	.968	1.145	.908		1.398		
Tampa, Fla	1.260	1.487	1.104	.904	.839			.732	
Toledo, Ohio	1.324	1.708	1.062	1.090	.980	.876			.801
Washington, D. C	1.238	1.820	1.009		.972				
Wichita, Kans	1.127	1.244	.803		.913				
Worcester, Mass	1.371	1.499	.953		.839	.815	1.384		
York, Pa	1.170	1.185	.867			.723			.640
Youngstown, Ohio	1.289	1.562	1.047	.937	1.025				

[1] Includes Rock Island and Moline, Ill., and Davenport, Iowa.

Union Weekly Hours

TREND OF WEEKLY HOURS [5]

The tendency toward further reductions in straight-time hours is reflected in average decreases between July 1, 1945, and July 1, 1946, in the four industries surveyed. Printing trades showed the most substantial straight-time reduction in hours (2.5 percent), followed closely by motor truck drivers and helpers (2.0 percent). The baking industry showed the smallest reduction in straight-time hours (0.3 percent). There was a drop in straight-time hours for the streetcar and bus operators who already worked under hour limitations. For those who had worked strictly on a "run" basis, a much larger proportion were included under standard hour regulations than in the previous year.

WEEKLY HOURS IN UNION AGREEMENTS, 1946

Straight-time weekly hours provided by collective bargaining agreements varied in the industries covered. The printing-trades workers—who have spear-headed past general drives for shorter hours without reduction in weekly earnings—secured shorter straight-time weekly hours and higher hourly rates than the workers in any of the three other industries studied. Average straight-time weekly hours in newspaper shops were 37.5 in July 1946 and in other printing establishments, 38.3. The postwar trend in printing has been toward a reduction in straight-time weekly hours; 9 of every 10 workers outside of newspaper shops had straight-time workweeks of 40 hours in 1945 compared with only 5 of 10 in 1946. The shift was toward workweeks ranging from 35 to 37½ hours, along with hourly rate increases more than sufficient to compensate for any reduction in weekly earnings caused by reduced hours. Night-shift workers in newspaper shops generally have shorter straight-time hours and higher basic wage rates than day workers.

The straight-time workweek for bakery workers averaged 41 hours on July 1, 1946. Almost 8 of every 10 union members operated under agreements providing the 40-hour straight-time week; most of the others had a straight-time workweek of 48 hours. All of the large machine shops (most of which operated in interstate commerce) had a 40-hour week. Many of the small hand shops making either American or Hebrew products and operating in a restricted area had straight-time workweeks exceeding 40 hours.

[5] Weekly hours refer to the maximum number of hours per week permitted by union agreements before overtime rates become effective. The number of hours actually worked in any 1 week may be greater or less than the weekly hours discussed. The trend of weekly hours is computed in the same manner as the trend of wage rates (see footnote 3).

The establishment of a definite limit on the straight-time hours of local transit operating employees is becoming prevalent. Transit workers are exempt from penalty overtime provisions of the Fair Labor Standards Act, and, until recent years, the general practice in the industry was to limit straight-time hours to those necessary to complete a particular run (a run consisting of a definite number of trips over a given route in a day). By July 1946, however, straight-time hour limitations ranged from 40 to 57 per week. About three-fifths of the workers were covered by straight-time hours of 44 or less; and most of the others had straight-time weeks limited to 48 hours.

Straight-time weekly hours for motortruck drivers—averaging 44.7 on July 1, 1946—were generally longer than those for workers in the other industries covered. Over two-fifths of the drivers worked under agreements providing for a 40-hour week, but substantial numbers of drivers worked weeks consisting of 44 and 48 hours and almost 15 percent had straight-time workweeks exceeding 48 hours.

Overtime and Sunday Rates

Practically all of the union members in each of the industries included in the study received 1½ times the basic rate of pay for work performed beyond the daily or weekly hours specified in the union contracts. Very few received double time as an initial daily or weekly overtime rate.

Payment of double the basic rate for unscheduled Sunday or for seventh day work was common in the printing, baking, and trucking industries—covering about 90 percent of the book and job workers, half of the newspaper and trucking workers, and over a third of the workers in bakeries. Operating employees in the local transit industry, however, seldom received double time for either seventh-consecutive-day work or for unscheduled Sunday work.

If double time did not prevail for unscheduled Sunday work, the usual rate was time and a half. Sunday work was very seldom prohibited by union agreements in any of the industries. About 30 percent of the bakery workers (generally Hebrew shop, pie, and pastry or bread and cake hand-shop workers) and about 15 percent of the truck drivers operated under agreements that made no provision for extra pay for Sunday or the seventh consecutive day.

Overtime on a daily basis was common in each of the industries covered. Time and a half after 8 hours a day was the most frequent requirement, although in many cases printing-trades workers received overtime pay after 7 or 7½ hours a day.

Paid Vacations

In July 1946, collective bargaining agreements in 75 cities provided paid vacations for practically all of the organized workers in the baking and local transit industries, most of those in the printing industry, and about 85 percent of those in the trucking industry.

The period of vacation provided and the length of service required to qualify varied among the industries. However, 2-weeks' vacation after 1 year's service was the rule for almost three-fifths of all local transit workers, well over half of all printing-trades workers, and about 25 percent of all bakery employees. In the trucking industry, only about 8 percent of the workers participated in such a plan. A vacation plan generally approved by the National War Labor Board (1 week after 1 year's service and 2 weeks after 5 years) covered a substantial portion of the workers in the baking industry (27 percent) and trucking industry (37 percent) but was relatively unimportant in the printing and local transit industries.

A week's vacation after 1 year's service was provided for in the plans covering 28 percent of the trucking workers and 15 percent of the printing workers. Another plan providing 1 week's vacation after 1 year's service and 2 weeks after 3 years included 24 percent of the union workers in the baking industry.

Wage Structure in Cotton-Textile Mills, April–May, 1946[1]

COTTON-GOODS MANUFACTURING, which provided employment for well over 400,000 plant workers in the spring of 1946, paid an average wage of 75 cents an hour, exclusive of overtime and shift premiums.[2] Average earnings at the present time are, without doubt, considerably higher, inasmuch as an 8-cent general wage increase became effective in a great number of mills late in the summer, and a further increase of 10 cents an hour went into effect in many of the northern mills in January 1947.

At the time of the survey, only 13 percent of all workers were being paid less than 65 cents per hour (table 1). A wage of at least 65 but less than 75 cents was received by over 46 percent of the workers; more than 6 percent received at least $1.00 an hour. Men, constituting almost 60 percent of the labor force, exceeded the average for all workers by 3 cents, while women failed to attain the general level by the same margin.

Wage Levels

VARIATIONS BY TYPE OF MILL

Cotton mills are of three types; namely, yarn, weaving, and integrated or a combination of the first two. Yarn mills are primarily engaged in the spinning of yarn from the raw cotton fiber. Workers in this branch averaged 71 cents an hour (table 1). Weaving mill workers, who received average earnings of 98 cents an hour, are basically engaged in producing cloth from yarn spun in other mills. The integrated mills, constituting the largest number, carry on all operations needed to transform raw cotton into cloth. Workers in integrated mills were paid an average wage of 76 cents. The differences in wages in the three industry branches are primarily due to differences in the occupational composition of the labor forces. Proportionately more skilled workers are needed in weaving than in integrated mills and more are used in the latter than in yarn mills.

OCCUPATIONAL AVERAGES

Among the selected occupations shown in table 2, weavers on Jacquard looms were the highest paid among both the men ($1.10 an hour) and the women (89 cents). Janitors had the lowest earnings

[1] Prepared by Kermit B. Mohn of the Bureau's Wage Analysis Branch. Detailed information on wages may be obtained in the near future from a mimeographed report: Wage Structure—Cotton Textile Mills, 1946.

[2] Data are based on a survey covering 346 establishments employing 179,089 workers. Excluded were establishments primarily engaged in the manufacture of cotton smallwares and thread, and independent dyeing and finishing establishments.

Average hourly earnings	United States [2]				New England				Middle Atlantic				Southeast				Southwest		
	All types of mills	Integrated mills	Yarn mills	Weaving mills	All types of mills	Integrated mills	Yarn mills	Weaving mills	All types of mills	Integrated mills	Yarn mills	Weaving mills	All types of mills	Integrated mills	Yarn mills	Weaving mills	All types of mills	Integrated mills	Yarn mills
Total number of workers	424,810	346,657	67,729	10,417	61,262	53,144	4,380	3,738	10,237	4,938	892	4,407	339,788	276,154	61,612	2,022	11,576	10,731	845
Average hourly earnings [1]	$0.75	$0.76	$0.71	$0.98	$0.82	$0.81	$0.79	$1.02	$0.90	$0.79	$0.70	$1.05	$0.74	$0.75	$0.70	$0.77	$0.68	$0.68	$0.67
Under 40.0 cents	[3]	[3]	[3]	[3]	-------	-------	-------	-------	[3]	-------	-------	[3]	[3]	[3]	[3]	-------	-------	-------	-------
40.0–42.4 cents	0.5	0.5	0.3	0.2	-------	-------	-------	-------	0.2	-------	-------	0.5	0.6	0.7	0.3	-------	0.1	[3]	0.6
42.5–44.9 cents	.1	.1	.3	-------	-------	-------	-------	-------	-------	-------	-------	-------	.1	.1	.3	-------	-------	-------	-------
45.0–47.4 cents	.1	.1	.4	.4	-------	-------	-------	-------	.4	[3]	-------	.8	.1	.1	.4	-------	[3]	[3]	-------
47.5–49.9 cents	[3]	[3]	.1	[3]	-------	-------	-------	-------	[3]	-------	-------	[3]	.1	.1	.1	-------	[3]	[3]	-------
50.0–52.4 cents	.5	.5	1.0	.5	[3]	[3]	-------	-------	.4	[3]	1.0	.7	.5	.4	1.1	1.1	3.7	4.0	-------
52.5–54.9 cents	.2	.2	.5	.1	[3]	[3]	-------	-------	.1	[3]	.1	.2	.2	.2	.5	-------	.3	.3	1.2
55.0–57.4 cents	1.6	1.5	2.4	1.3	0.1	0.1	0.1	0.1	2.8	0.3	17.5	2.7	1.4	1.3	2.0	.5	14.1	13.1	27.9
57.5–59.9 cents	1.3	1.2	2.4	.4	.1	.1	-------	-------	1.7	2.1	3.6	.8	1.5	1.2	2.6	.5	3.9	4.2	.4
60.0–62.4 cents	5.1	4.7	7.6	2.5	.2	.1	.3	.9	4.3	4.4	7.8	3.4	5.7	5.2	8.2	3.7	13.1	14.0	2.5
62.5–64.9 cents	3.6	3.6	4.2	.9	[3]	[3]	[3]	-------	3.0	2.2	18.2	.8	4.1	4.0	4.4	2.7	10.1	10.8	.6
65.0–67.4 cents	19.6	18.6	25.9	7.8	18.0	19.3	15.1	1.5	9.7	15.3	6.8	4.2	20.2	18.7	26.9	26.5	17.0	15.8	33.7
67.5–69.9 cents	11.3	11.6	10.0	3.6	9.9	10.6	8.9	.7	5.5	9.0	4.0	1.8	11.6	12.0	10.3	13.3	6.3	6.5	3.4
70.0–72.4 cents	10.0	10.1	10.7	3.5	7.6	7.7	12.5	2.1	7.5	10.7	9.6	3.7	10.7	10.7	10.6	5.5	5.9	5.8	7.9
72.5–74.9 cents	5.6	5.6	5.8	1.6	5.8	5.8	10.4	1.4	3.4	5.6	3.8	.8	5.7	5.7	5.6	3.8	3.1	3.2	2.2
75.0–77.4 cents	6.9	6.9	7.2	6.0	6.6	6.2	9.6	8.3	7.1	9.6	4.3	4.8	7.1	7.1	7.1	3.5	4.8	4.7	5.3
77.5–79.9 cents	4.2	4.3	4.2	1.4	5.1	5.1	8.2	1.1	3.4	5.1	3.4	1.6	4.1	4.1	4.0	1.6	2.6	2.6	2.2
80.0–84.9 cents	8.2	8.5	6.4	7.4	12.6	12.9	10.8	10.6	6.9	6.8	10.9	6.2	7.5	7.8	6.0	4.6	6.3	6.5	4.0
85.0–89.9 cents	6.2	6.6	4.4	5.6	7.8	8.2	5.1	5.0	4.7	5.8	3.3	3.8	6.1	6.4	4.4	11.0	3.9	4.0	2.6
90.0–94.9 cents	5.7	6.2	2.9	8.1	7.2	6.8	7.4	13.8	5.7	8.2	.9	3.8	5.6	6.2	2.6	5.9	1.6	1.4	3.4
95.0–99.9 cents	3.2	3.5	1.2	7.4	6.0	6.0	3.7	9.0	3.8	3.9	1.3	4.1	2.8	3.1	1.0	12.0	1.1	1.1	1.5
100.0–104.9 cents	2.5	2.8	1.0	4.3	3.2	3.0	4.0	5.8	3.1	2.3	.9	4.3	2.5	2.9	.8	1.1	.9	1.0	.2
105.0–109.9 cents	1.0	1.1	.5	4.0	2.1	2.0	1.7	4.0	3.0	1.5	.7	5.2	.8	.9	.4	1.3	.6	.6	-------
110.0–114.9 cents	1.0	1.0	.3	4.0	4.1	4.2	1.3	6.2	2.2	1.4	.7	3.5	.4	.4	.2	.4	.1	.1	-------
115.0–119.9 cents	.4	.3	.1	4.5	1.1	.8	.5	6.3	2.5	.9	-------	4.9	.2	.3	.1	.7	.1	.1	-------
120.0–124.9 cents	.3	.2	.1	5.2	.8	.4	.3	7.1	4.0	3.0	-------	6.1	.1	.1	.1	.1	.2	.2	-------
125.0–129.9 cents	.2	.1	.1	3.2	.5	.3	[3]	2.7	2.5	.6	.4	4.9	.1	.1	[3]	.2	[3]	[3]	-------
130.0–134.9 cents	.2	.1	[3]	3.5	.4	.2	.1	3.3	2.6	.6	.4	5.3	.1	.1	[3]	-------	[3]	[3]	-------
135.0–139.9 cents	.1	.1	[3]	2.7	.2	.1	-------	1.7	2.4	.4	.4	4.9	.1	.1	[3]	-------	-------	-------	-------
140.0–144.9 cents	.1	[3]	[3]	3.2	.2	.1	-------	3.3	2.2	.2	-------	4.9	[3]	[3]	[3]	-------	-------	-------	-------
145.0–149.9 cents	.1	[3]	[3]	2.1	.2	[3]	-------	1.9	1.4	.1	-------	3.2	[3]	[3]	-------	-------	.1	[3]	.2
150.0–159.9 cents	.1	[3]	[3]	2.4	.1	[3]	-------	2.2	1.7	[3]	-------	3.9	[3]	[3]	[3]	-------	.1	[3]	.2
160.0 cents and over	.1	[3]	[3]	2.2	.1	[3]	-------	1.0	1.8	[3]	-------	4.2	[3]	[3]	[3]	-------	-------	-------	-------
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[1] Excludes premium pay for overtime and night work.
[2] Includes data for other regions in addition to those shown separately.
[3] Less than 0.05 of 1 percent.

among both men (64 cents) and women (63 cents). The largest single group of workers (over 45,000), were women ring-frame spinners, who averaged 73 cents an hour.

REGIONAL DIFFERENCES

Approximately four-fifths of cotton-mill employment is located in the Southeast region; workers in this region were paid an average of 74 cents in the spring of 1946. New England, in which region the workers averaged 82 cents, ranked second, with about one-seventh of the total employment in the industry. The Southwest and Middle Atlantic regions had practically all the remainder of the workers, in almost equal proportions. Less than 1 percent of the New England workers, compared with 14 percent of those in the Southeast, were paid less than 65 cents.

The 8-cent over-all difference between New England and the Southeast was attributable in part to marked variations in industry structure and type of product manufactured. The Southeast had over 90 percent of the country's yarn-mill employment, which included over 18 percent of the cotton-mill workers in that region. New England yarn mills, on the other hand, employed only about 7 percent of the total workers in the industry. A 9-cent difference in favor of New England (79 cents compared with 70) separated the yarn-mill averages in the two regions, while the difference in integrated mills between the two regions amounted to only 6 cents (81 cents compared with 75). Furthermore, New England had a greater proportion than the Southeast region of the higher-paying weaving-mill jobs. Workers in this branch in New England earned an average of $1.02 compared with 77 cents in the Southeast. The Middle Atlantic region, however, had the greatest proportion of this branch of the industry (over 42 percent) and the highest earnings ($1.05).

TABLE 2.—*Average straight-time hourly earnings*[1] *for selected occupations in cotton-textile mills, by region, April–May 1946*

Occupation and sex	United States		New England		Middle Atlantic		Border States	
	Number of workers	Average hourly rates	Number of workers	Average hourly rates	Number of workers	Average hourly rates	Number of workers	Average hourly rates
Men								
Battery hands	1,423	$0.68	533	$0.68	18	$0.81	9	(2)
Boil-off machine operators	50	.86	7	(2)	4	(2)		
Calender tenders	182	.78	48	.89	17	.78		
Card grinders	3,184	.89	351	.93	33	.87	5	$0.85
Card tenders	8,955	.70	986	.76	140	.72	35	.72
Carpenters, maintenance	1,697	.87	222	1.03	33	1.07	10	1.00
Color mixers, dye house	136	.79	31	.98	4	(2)		
Color mixers, print shop	20	.92	10	.99				
Doffers, spinning frame	20,637	.77	1,370	.84	128	.83	6	(2)
Dry-can operators	387	.73	43	.81	42	.76		

See footnotes at end of table.

Table 2.—*Average straight-time hourly earnings*[1] *for selected occupations in cotton textile mills, by region, April–May 1946*—Continued

Occupation and sex	United States		New England		Middle Atlantic		Border States	
	Number of workers	Average hourly rates	Number of workers	Average hourly rates	Number of workers	Average hourly rates	Number of workers	Average hourly rates
Men—Continued								
Dyeing-machine tenders, cloth:								
Jigger	192	$0.77	71	$0.69	51	$0.78		
Other	212	.87	132	.91	2	(2)	4	(2)
Spiral dye beck	24	.71			2	(2)		
Dyeing-machine tenders, raw stock	344	.67	48	.76	8	(2)	2	(2)
Dyeing-machine tenders, yarn	425	.75	42	.96	12	.83		
Electricians, maintenance	1,123	.95	157	1.05	20	1.09	6	$1.1
Filling hands	3,592	.66	354	.67	29	.64	9	(2)
Inspectors, cloth, hand	672	.76	52	.83	40	.89	11	.70
Inspectors, cloth, machine	1,046	.73	111	.83	6	(2)	4	(2)
Janitors	8,568	.64	819	.67	92	.66	17	.65
Kier operators	90	.77	26	.90	12	.77		
Loom fixers, Jacquard	937	1.06	123	1.23	156	1.36	5	(2)
Loom fixers, other than Jacquard	14,408	.99	2,218	1.12	281	1.20	37	.97
Machine printers	34	.98	22	.98				
Machinists, maintenance	1,792	.96	282	1.06	44	1.13	16	1.23
Maintenance men, general utility	664	.84	67	.90	24	1.03	10	.75
Mangle tenders	155	.79	72	.88	16	.82		
Mechanics, maintenance	2,753	.89	139	.99	28	1.04	4	(2)
Roving men	5,564	.66	603	.68	69	.65	17	.67
Second hands	6,143	1.03	895	1.12	127	1.07	26	1.09
Shearing-machine operators	212	.86	67	.93	8	(2)	5	(2)
Slasher tenders	3,663	.85	458	1.00	37	.93		
Slubber tenders	6,546	.80	447	.92	108	.83	8	(2)
Spinners, ring frame	1,071	.79	617	.83	28	.75		
Stock clerks	748	.77	109	.79	23	.84	6	(2)
Tenter frame tenders	338	.90	95	.88	28	.79		
Truckers, hand, general, including bobbin boys	8,102	.66	837	.73	79	.68	33	.64
Twister tenders	3,661	.75	204	.96	28	1.15	27	.76
Washer tenders, cloth	234	.76	85	.82	13	.81		
Watchmen	2,885	.67	444	.76	116	.68	13	.72
Weavers, Jacquard loom	2,475	1.10	338	1.11	1,188	1.29	29	1.11
Weavers, other than Jacquard loom:								
Plain automatic	13,266	.86	1,822	.90	238	1.15	5	(2)
Dobby	2,316	.95	598	1.10	36	1.16	19	1.07
Box	1,384	.93	569	1.01	49	1.10	23	.81
Other	1,097	.93	291	1.16	196	1.00		
Winders, cloth, bolts or tubes	156	.83	68	.94	6	(2)		
Winders, yarn	1,153	.75	117	1.09	51	.98	2	(2)
Women								
Battery hands	17,906	.67	2,578	.68	165	.68		
Card tenders	371	.69	21	.71				
Doffers, spinning frame	1,956	.74	519	.79	61	.77	30	.71
Filling hands	432	.66	6	(2)	25	.67	9	(2)
Inspectors, cloth, hand	4,470	.70	1,103	.72	168	.79	12	.69
Inspectors, cloth, machine	3,823	.69	521	.70	32	.65	5	(2)
Janitors	3,208	.63	327	.66	36	.62	28	.65
Roving men	364	.66	24	.67	3	(2)	6	(2)
Second hands	34	.87	12	.93	4	(2)		
Spinners, ring frame	45,693	.73	4,337	.79	304	.75	76	.73
Stock clerks	171	.71	29	.73	4	(2)	1	(2)
Truckers, hand, general, including bobbin boys	646	.66	4	(2)	1	(2)	2	(2)
Twister tenders	1,586	.72	290	.74	15	.77	25	.79
Weavers, Jacquard loom	892	.89	102	.95	218	1.06		
Weavers, other than Jacquard loom:								
Plain automatic	14,493	.83	2,193	.88	235	1.00	31	.87
Dobby	2,037	.87	330	.93	59	.84	8	(2)
Box	966	.86	177	.99	22	.82	20	.77
Other	750	.84	186	.93	219	.91		
Winders, yarn	27,601	.71	2,525	.80	684	.77	132	.75

See footnotes at end of table.

TABLE 2.—*Average straight-time hourly earnings*[1] *for selected occupations in cotton-textile mills, by region, April–May 1946*—Continued

Occupation and sex	Southeast		Great Lakes		Southwest	
	Number of workers	Average hourly rates	Number of workers	Average hourly rates	Number of workers	Average hourly rates
Men						
Battery hands	835	$0.68	2	(2)	26	$0.61
Boil-off machine operators	39	.83				
Calender tenders	106	.74			11	.66
Card grinders	2,714	.88	2	(2)	79	.79
Card tenders	7,488	.69	8	(2)	298	.64
Carpenters, maintenance	1,380	.85	1	(2)	51	.70
Color mixers, dye house	83	.75			18	.60
Color mixers, print shop	10	.85				
Doffers, spinning frame	18,488	.77	24	$0.55	621	.71
Dry-cans operators	295	.72			7	(2)
Dyeing-machine tenders, cloth:						
Jigger	70	.85				
Other	74	.83				
Spiral dye beck	10	.76			12	.59
Dyeing-machine tenders, raw stock	266	.65			20	.64
Dyeing-machine tenders, yarn	371	.72				
Electricians, maintenance	925	.94			15	.89
Filling hands	3,022	.66	7	(2)	171	.60
Inspectors, cloth, hand	558	.75	1	(2)	10	.59
Inspectors, cloth, machine	897	.72	2	(2)	26	.62
Janitors	7,560	.63	6	(2)	74	.59
Kier operators	51	.70			1	(2)
Loom fixers, Jacquard	634	.96	5	(2)	14	1.04
Loom fixers, other than Jacquard	11,440	.97	22	.99	410	.84
Machine printers	12	.98				
Machinists, maintenance	1,411	.94			39	.83
Maintenance men, general utility	528	.82	5	.89	30	.77
Mangle tenders	56	.69			11	.64
Mechanics, maintenance	2,555	.89			27	.74
Roving men	4,712	.66			163	.60
Second hands	4,874	1.02	8	(2)	213	.83
Shearing-machine operators	130	.83			2	(2)
Slasher tenders	3,068	.83	14	.84	86	.73
Slubber tenders	5,842	.79	3	(2)	138	.66
Spinners, ring frame	373	.72			53	.71
Stock clerks	586	.76	2	(2)	22	.73
Tenter frame tenders	215	.92				
Truckers, hand, general, including bobbin boys	7,021	.66			132	.60
Twister tenders	3,370	.74	1	(2)	31	.64
Washer tenders, cloth	133	.73			3	(2)
Watchmen	2,221	.66	4	(2)	87	.62
Weavers, Jacquard loom	898	.84	6	(2)	16	.94
Weavers, other than Jacquard loom:						
Plain automatic	10,944	.85	1	(2)	256	.71
Dobby	1,645	.89	18	1.04		
Box	715	.86	13	1.12	15	.62
Other	504	.82			106	.73
Winders, cloth, bolts, or tubes	82	.74				
Winders, yarn	928	.70	4	(2)	51	.68
Women						
Battery hands	14,514	.67	44	.59	605	.60
Card tenders	325	.69			25	.64
Doffers, spinning frame	1,250	.72			96	.68
Filling hands	344	.67	6	(2)	42	.62
Inspectors, cloth, hand	3,132	.69	7	(2)	48	.65
Inspectors, cloth, machine	3,205	.69	8	(2)	52	.60
Janitors	2,736	.62			81	.60
Roving men	315	.66			16	.61
Second hands	18	.86				
Spinners, ring frame	39,794	.72	50	.61	1,132	.68
Stock clerks	124	.71			13	.67
Truckers, hand, general, including bobbin boys	639	.66				
Twister tenders	1,183	.73	2	(2)	71	.62
Weavers, Jacquard loom	564	.82			8	(2)
Weavers, other than Jacquard loom:						
Plain automatic	11,478	.83			556	.75
Dobby	1,609	.86	5	(2)	26	.83
Box	683	.85	7	(2)	57	.63
Other	164	.80	23	.59	158	.70
Winders, yarn	23,663	.70	29	.67	568	.65

[1] Excludes premium pay for overtime and night work.
[2] Insufficient number of workers to justify presentation of an average.

Information obtained was not sufficient to make a comparison of wages by product in integrated or weaving mills. In general, though, the South produces great amounts of regular lines of cotton goods, such as sheeting and print cloth, while New England manufactures more combed-yarn fabrics and fancy goods. Direct comparisons of wages by product in yarn mills could be made for combed yarn, in which the average wage paid New England workers exceeded that paid in the Southeast by 8 cents (79 cents compared with 71).

Wage differences between New England and Southeast workers were very slight among the unskilled occupations but tended to widen as the degree of skill increased. In integrated mills, for example, men battery hands had the same average (68 cents) in both regions, while there was only a difference of 1 cent (68 cents compared with 67) for women. Men card tenders in New England had an advantage of 6 cents over those in the Southeast, and women spinners in New England bettered their southern counterparts by the same margin. Men working in New England as automatic loom weavers received 4 cents more, and women 5 cents more than such workers in the Southeast. In yarn mills the job differentials between the two regions were greater, men card tenders in New England having an advantage of 11 cents and women spinners an advantage of 7 cents.

Wages were not uniform within each of the two leading cotton-textile producing regions. In the Southeast, the average for all men was 76 cents; among 12 important areas within the region, comparable figures for men ranged from 71 to 79 cents, with 3 of the areas exactly equalling the regional average. Similarly the regional average for women, 71 cents, fell within an area range of from 67 to 76 cents. Among those occupations found in each of the 12 areas the differences in the area averages for men ranged from 6 to 30 cents. Quite frequently the job averages in some of the southern areas exceeded the comparable figures in New England areas.

Occupational earnings in New England ranged from 67 cents to $1.23 for men and 66 to 99 cents for women. The range among men in the Southeast was from 63 cents to $1.02 and for women from 62 to 86 cents. There was little or no difference between the rates for men and women among the unskilled occupations in both regions. The highest rates for men occurred in occupations in which women were usually not employed.

Both the highest and lowest regional occupational averages were found in regions other than New England and the Southeast. Men fixers of Jacquard looms in the Middle Atlantic region averaged $1.36 an hour, and women weavers on the same type of loom and in the same region earned $1.06. Men spinning-frame doffers at 55 cents and

women battery hands and weavers on certain types of looms at 59 cents, both in the Great Lakes region, received the lowest hourly rates, on the average, for their respective sexes. Differences in product probably contributed substantially to these variations.

Data on minimum entrance and job rates revealed that 65 cents was the most common minimum rate in effect in the most important cotton-textile regions. In the Southeast, about two-fifths of the plant minimum entrance rates and almost half of the minimum job rates were concentrated at this figure, with practically none higher and some running as low as 40 cents. Three-fifths of the New England plant entrance rates and almost three-fourths of the job rates were quoted as 65 cents.

VARIATION BY SIZE OF ESTABLISHMENT AND UNIONIZATION

Cotton-textile earnings, on a national basis, tended to be somewhat higher in the larger establishments (those having over 500 workers) than in smaller ones, although among the unskilled occupations the differences were generally very small. The same relationships existed in the Southeast region. In New England, however, the advantages frequently were in favor of the smaller plants, especially among men in higher-paying jobs. The higher-paid workers in small weaving mills in New England were primarily responsible for most of the exceptions in both the regional and national comparisons.

Union workers in the country as a whole received more on the average than those not covered by agreements, in a great majority of the selected occupations. In New England, where approximately 90 percent of the workers were unionized, this relationship was not as clear-cut, since the nonunion workers frequently received more than those in union shops. On the other hand, union workers in the Southeast, who constituted less than a fourth of the total employment, generally had higher earnings than workers in nonunion shops.

Supplementary Wage Practices

In April–May 1946, many cotton-mill workers were scheduled to work more than 40 hours a week, thus receiving the benefits of overtime compensation. Over half of the establishments studied, nationally and in the Southeast, had workweeks of more than 40 hours, with 28 percent of the mills in the country as a whole and over one-third in the Southeast having a normal week of 48 hours. Almost 90 percent of the mills had second-shift and over 63 percent third-shift operations. Very few paid a wage differential for the second shift, but a large majority of those having 3 shifts provided premium compensation for the third or other shift.

Paid vacations were granted to the plant employees in over three-quarters of the cotton mills studied. In New England the practice was followed in all except 1 mill; in the Southeast 7 out of every 10 mills had this policy. In most cases the vacation period was 1 week.

About 22 percent of the mills provided some sort of nonproduction bonus for their employees. The most common was a Christmas bonus. Over half the mills in the Nation, 10 out of 11 in New England, and about 44 percent in the Southeast, had installed insurance plans for their workers. Life insurance was most frequently reported; health insurance ranked second; a number of plants reported both types.

Wage Structure in Woolen and Worsted Industry, April 1946[1]

NEARLY A THIRD of the estimated 158,200 plant workers in the woolen and worsted industry in April 1946 received $1.00 or more an hour, exclusive of premium pay for overtime and night work. Earnings of about 23,500 workers fell below 75 cents an hour, but only about 5,700 received less than 65 cents. Straight-time average hourly earnings for all plant workers amounted to 94 cents, a relatively high level in comparison with wages received in other textile industries.

Plant workers in the worsted branch of the industry generally received higher earnings than those in woolen mills in New England and the Middle Atlantic States—the major producing regions—and in the country as a whole. To some extent, the differential between the two branches reflects variations in occupational structure arising from processes used in preparing yarns for weaving. Card tenders, for example, are of greater importance in woolen than in worsted mills, while comber tenders, a higher-paid group of workers, are employed almost entirely in the manufacture of worsted.

The most significant factors contributing to the favorable wage position of woolen and worsted textile workers appear to be the concentration of the industry in high wage areas, the large proportion of skilled and semiskilled workers employed, and extensive unionization.[2] Within the industry, earnings are affected in varying degree by method of wage payment, type of mill, and kind of product.

[1] Prepared by Hilda W. Callaway of the Bureau's Wage Analysis Branch. Detailed information on wages and related practices will be presented in two forthcoming mimeographed reports: Wage Structure—Woolen and Worsted Textiles, April 1946; and Occupational Wage Relationships—Woolen and Worsted Textiles, April 1946. Wage statistics by locality are available in the Bureau's regional offices.

[2] Data are based on an April 1946 survey of 279 woolen and worsted mills with a total employment of 92,756 workers, representing over half of the mills and nearly three-fifths of the estimated employment. Field representatives of the Bureau obtained the data from April 1946 pay rolls and other company records. Estimated employment on all shifts in mills with 8 or more employees is shown instead of employment in mills that were actually surveyed. The study excluded dyeing and finishing plants and mills primarily engaged in weaving carpets and rugs, manufacturing carpet and rug yarn, wool scouring, and wool combing.

Wage Levels

GEOGRAPHIC VARIATIONS

Unlike cotton and some other textile industries, the manufacture of woolen and worsted goods is primarily a northern industry. New England mills account for over three-fifths of the plant workers and those in the Middle Atlantic States for nearly a fourth. In the former region, wage levels for all plant workers were slightly higher than in the latter (table 1). To some extent, this reflects the greater concentration in New England both of large mills and integrated plants, as well as a larger proportion of men in the work force. In the Middle Atlantic States, yarn, weaving, and integrated plants were found to be of almost equal importance. It is more significant, however, that in New England the over-all average wage for women was higher. Variations in earnings [3] of men and women in the two most important production centers in the New England and Middle Atlantic regions are shown below:

	Average hourly earnings		
	Total	*Men*	*Women*
New England	$0.97	$1.02	$0.90
Providence, R. I.	.99	1.06	.91
Lowell, Mass.	.95	1.00	.90
Middle Atlantic	.92	1.00	.84
Paterson, N. J.	1.01	1.06	.96
Philadelphia, Pa.	.91	1.04	.80
Southeast [1]	.79	.82	.73

[1] Mills are not sufficiently concentrated in any wage area to warrant separate presentation of data.

Men's earnings exceeded those of women by 11 percent in New England woolen mills, and by 14 percent in worsted mills; the corresponding figures in Middle Atlantic mills were 25 and 20 percent. Proportionately, 3 times as many women in Middle Atlantic woolen mills as in New England received less than 75 cents an hour, and in the worsted branch the ratio was 6 to 1. These comparisons reflect differences in wage rates for similar jobs, in type of plant, and in composition of the force. A larger number of yarn mills, which have relatively few skilled workers, and in which women constitute over two-thirds of the labor force, are located in the Middle Atlantic States. In weaving and integrated mills, higher wage rates were found, with the exception of a few occupations involving spinning, sorting, and dyeing.

[3] The figures presented exclude premium overtime, shift differentials, and nonincentive bonuses (such as Christmas and profit-sharing), but include cost-of-living bonuses. In addition, earnings of inexperienced beginners, apprentices, and handicapped plant workers are included in the over-all averages and distributions but excluded from the occupational data; administrative, professional, and executive personnel were omitted entirely from the study.

TABLE 1.—*Percentage distribution of workers in woolen and worsted mills, United States and selected regions, by straight-time average hourly earnings,[1] April 1946*

Average hourly earnings [1]	United States [2]			New England			Middle Atlantic		
	Woolen and worsted	Woolen	Worsted	Woolen and worsted	Woolen	Worsted	Woolen and worsted	Woolen	Worsted
Under 55.0 cents	0.5	0.7	0.4	0.1	0.1	0.1	0.7	0.8	0.6
55.0–59.9 cents	1.1	1.4	.8	.3	.4	.3	1.8	2.3	1.5
60.0–64.9 cents	2.0	2.6	1.5	.5	1.1	.1	3.6	3.4	3.7
65.0–69.9 cents	5.2	7.6	3.1	1.4	2.2	.8	6.3	9.0	4.5
70.0–74.9 cents	6.0	7.1	5.0	2.9	4.2	2.0	9.6	9.1	9.9
75.0–79.9 cents	15.6	13.5	17.5	18.4	14.9	21.1	11.4	15.1	8.9
80.0–84.9 cents	12.9	11.7	13.9	14.1	12.4	15.6	11.4	13.2	10.3
85.0–89.9 cents	10.5	10.5	10.6	10.9	11.2	10.7	10.7	9.3	11.8
90.0–94.9 cents	8.4	8.3	8.5	9.2	9.3	9.0	8.2	7.6	8.5
95.0–99.9 cents	6.5	6.5	6.5	6.9	7.3	6.6	6.4	6.0	6.6
100.0–104.9 cents	4.7	4.6	4.9	4.9	4.9	4.9	5.1	4.7	5.4
105.0–109.9 cents	4.0	3.9	4.1	4.3	4.1	4.3	3.9	3.8	4.0
110.0–114.9 cents	3.7	4.3	3.2	4.2	5.5	3.2	3.5	3.4	3.6
115.0–119.9 cents	3.7	3.5	3.8	4.1	4.4	4.0	3.5	2.8	4.0
120.0–124.9 cents	3.5	3.4	3.6	4.0	4.4	3.7	3.5	2.5	4.1
125.0–129.9 cents	3.0	2.9	3.0	3.4	3.8	3.1	3.0	2.3	3.4
130.0–134.9 cents	2.3	2.4	2.2	2.6	3.1	2.2	2.2	1.5	2.7
135.0–139.9 cents	2.2	1.8	2.5	2.7	2.3	2.9	1.6	1.0	2.0
140.0–144.9 cents	1.6	1.4	1.8	2.0	2.0	2.0	1.1	.6	1.5
145.0–149.9 cents	.9	.7	1.1	1.1	.8	1.3	.8	.6	.9
150.0–159.9 cents	.9	.7	1.1	1.2	.9	1.3	.7	.4	.8
160.0–169.9 cents	.4	.3	.4	.4	.4	.4	.4	.4	.5
170.0 cents and over	.4	.2	.5	.4	.3	.4	.6	.2	.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	158,200	74,025	84,175	99,800	41,400	58,400	35,350	14,250	21,100
Average hourly earnings, all workers [1]	$0.94	$0.92	$0.95	$0.97	$0.97	$0.97	$0.92	$0.88	$0.94

[1] Excludes premium pay for overtime and night work.
[2] Includes data for other regions in addition to those shown separately.

The Southeast was at the low end of the wage scale; earnings of 7 percent of the entire work force were 19 percent below the New England over-all average. Although most southern mills are integrated plants, as in New England, factors contributing to the differential are a high proportion of small plants, lack of unionization, and location of a majority of the mills in widely scattered small cities of less than 25,000 population. Variations by sex of workers' earnings in the South were less than in New England. Men averaged 9 and 11 percent more than women, in woolen and worsted mills, respectively. Over two-thirds of the women and half of the men in southeastern mills earned less than 75 cents an hour. In New England, only 8 percent of the women and 3 percent of the men had comparable earnings.

OCCUPATIONAL DIFFERENCES IN EARNINGS

Hourly earnings for all key plant occupations show a wider range for men than for women. Even when both men and women were employed in the same occupation, men's earnings generally were appreciably higher than women's—a differential which cannot be related entirely to individual productivity under incentive methods of wage

payment. Although a large majority of the New England and Middle Atlantic mills had an incentive system in operation, only about a third of all plant employees in each region were paid according to individual output.

TABLE 2.—*Straight-time average hourly earnings [1] for selected occupations in woolen and worsted mills, United States and selected regions, April 1946*

Occupation and sex	United States [2]				New England			
	Woolen		Worsted		Woolen		Worsted	
	Number of workers	Average hourly rates	Number of workers	Average hourly rates	Number of workers	Average hourly rates	Number of workers	Average hourly rates
Men								
Card grinders	162	$0.96	61	$0.95	57	$0.99	57	$0.93
Card tenders	3,463	.82	715	.85	1,803	.84	383	.85
Carpenters, maintenance	244	1.03	310	1.16	162	1.02	259	1.16
Color mixers, dye house	118	.90	100	.97	68	.92	69	.98
Comber tenders	27	.81	671	.90	2	[3]	607	.91
Doffers, spinning frame	260	.79	252	.78	58	.80	219	.80
Dresser tenders	729	1.13	508	1.22	468	1.16	329	1.28
Dry-can operators	308	.81	204	.88	176	.83	181	.87
Dyeing-machine tenders, cloth	487	.84	477	.93	392	.84	308	.91
Dyeing-machine tenders, raw stock	657	.84	202	.84	386	.84	122	.92
Dyeing-machine tenders, yarn	47	.75	138	.98	17	.84	111	1.00
Electricians, maintenance	164	1.11	198	1.18	101	1.11	143	1.17
Fuller tenders	725	.87	276	.94	433	.87	136	.98
Inspectors, cloth, hand	584	.92	1,168	1.13	422	.94	914	1.13
Janitors	277	.72	217	.78	54	.78	132	.79
Loom fixers, other than Jacquard	1,476	1.24	1,485	1.38	840	1.29	1,048	1.40
Machinists, maintenance	185	1.16	374	1.19	97	1.16	291	1.17
Maintenance men, general utility	364	.99	141	.94	232	.97	123	.95
Mangle tenders	179	.83	217	1.07	148	.85	87	.98
Mechanics, maintenance	280	.99	195	1.15	154	1.02	115	1.14
Second hands	2,056	1.12	1,185	1.20	1,238	1.15	710	1.23
Shearing-machine operators	528	.87	462	1.05	363	.90	267	1.09
Sorters, wool	263	1.01	550	1.30	38	1.06	443	1.33
Spinners, mule	4,596	1.17	1,275	1.39	3,172	1.23	957	1.42
Spinners, ring frame	428	1.07	364	.92	250	1.18	328	.94
Stock clerks	139	.85	124	.93	74	.88	78	.98
Tenter-frame tenders	110	.81	94	.99	81	.81	53	.92
Truckers, hand	1,276	.78	1,488	.86	677	.81	992	.88
Twister tenders	72	.81	101	.96	28	.85	76	.96
Washer tenders, cloth	668	.86	507	.92	446	.88	334	.93
Watchmen	587	.76	607	.84	302	.79	433	.86
Weavers, other than Jacquard loom	6,276	1.20	4,548	1.25	3,890	1.24	3,311	1.27
Winders, cloth, bolts or tubes	151	.83	163	.96	103	.85	85	.95
Winders, yarn	110	.80	189	.89	11	.90	121	.91
Women								
Card tenders	451	.79	69	.83	325	.79	8	[3]
Comber tenders	75	.82	615	.82			253	.85
Doffers, spinning frame	414	.69	2,189	.74	56	.74	1,622	.77
Dresser tenders	106	.80	129	.94	17	1.02	26	.78
Inspectors, cloth, hand	944	.74	542	.84	132	.78	189	.91
Janitors	67	.69	81	.76	13	.72	29	.76
Spinners, mule	380	92	295	.96	56	1.03	2	[3]
Spinners, ring frame	2,144	.84	4,642	.85	998	.88	3,366	.88
Truckers, hand	82	.75	395	.75	54	.79	375	.75
Twister tenders	538	.76	3,517	.84	153	.78	2,359	.88
Weavers, other than Jacquard loom	3,729	1.05	1,741	1.18	1,862	1.14	884	1.19
Winders, yarn	4,407	.80	7,121	.86	2,193	.85	5,118	.87

See footnotes at end of table.

TABLE 2.—*Straight-time average hourly earnings* [1] *for selected occupations in woolen and worsted mills, United States and selected regions, April 1946*—Continued

Occupation and sex	Middle Atlantic				Southeast			
	Woolen		Worsted		Woolen		Worsted	
	Number of workers	Average hourly rates	Number of workers	Average hourly rates	Number of workers	Average hourly rates	Number of workers	Average hourly rates
Men								
Card grinders	31	$0.99	4	(3)	54	$0.83		
Card tenders	842	.86	281	$0.88	334	.71	38	$0.78
Carpenters, maintenance	35	1.15	44	1.16	30	.90	6	.83
Color mixers, dye house	10	1.01	23	1.01	28	.80	8	(3)
Comber tenders	2	(3)	52	.80				
Doffers, spinning frame	75	.73	23	.61	98	.82	10	.76
Dresser tenders	118	1.19	140	1.20	58	1.05	38	.82
Dry-can operators	43	.87	23	.97	62	.76		
Dyeing-machine tenders, cloth	30	.91	163	.97	30	.74	6	(3)
Dyeing-machine tenders, raw stock	96	.93	8	(3)	58	.76	72	.68
Dyeing-machine tenders, yarn			27	.92				
Electricians, maintenance	29	1.17	45	1.25	18	1.05	10	1.02
Fuller tenders	149	.88	131	.92	44	.79	8	(3)
Inspectors, cloth, hand	54	.90	230	1.19	50	.70	22	.76
Janitors	57	.78	54	.83	116	.65	28	.63
Loom fixers, other than Jacquard	240	1.31	357	1.41	164	1.11	70	1.05
Machinists, maintenance	60	1.16	72	1.27	22	1.09	10	.90
Maintenance men, general utility	26	1.19	10	.97	16	.84	6	.73
Mangle tenders			118	1.17	12	.70	12	.70
Mechanics, maintenance	26	1.14	70	1.17	60	.81	4	(3)
Second hands	341	1.10	373	1.24	218	1.01	90	.91
Shearing-machine operators	50	.88	169	1.04	78	.73	26	.71
Sorters, wool	130	1.18	88	1.27	22	.69	14	.57
Spinners, mule	649	1.13	316	1.30	354	.95		
Spinners, ring frame	80	.96	24	.77	36	.79	12	.82
Stock clerks	22	.85	43	.86	16	.80	2	(3)
Tenter-frame tenders	6	(3)	35	1.14	6	(3)	6	(3)
Truckers, hand	148	.84	397	.87	298	.69	76	.67
Twister tenders	12	1.02	19	1.03	30	.70	6	(3)
Washer tenders, cloth	74	.86	158	.92	52	.77	12	.72
Watchmen	106	.78	141	.81	80	.67	30	.72
Weavers, other than Jacquard loom	962	1.13	1,081	1.20	656	1.19	144	.98
Winders, cloth, bolts or tubes	13	.88	66	1.02	20	.71	12	.71
Winders, yarn	50	.84	66	.84	46	.74	2	(3)
Women								
Card tenders	32	.81	12	.86	12	.78	40	.83
Comber tenders	74	.82	336	.80				
Doffers, spinning frame	328	.69	361	.67	16	.67	160	.66
Dresser tenders	4	(3)	79	1.06	12	.74	22	.72
Inspectors, cloth, hand	470	.73	298	.82	146	.67	54	.73
Janitors	17	.65	44	.80	12	.65	4	(3)
Spinners, mule	93	.98	293	.96	24	.92		
Spinners, ring frame	449	.76	901	.80	398	.78	210	.71
Truckers, hand	12	.67	12	.87	14	.65	8	(3)
Twister tenders	345	.75	933	.79	8	(3)	108	.62
Weavers, other than Jacquard loom	542	1.00	760	1.19	304	1.03	78	.94
Winders, yarn	1,197	.76	1,545	.85	458	.72	298	.73

[1] Excludes premium pay for overtime and night work.
[2] Includes data for other regions in addition to those shown separately.
[3] Insufficient number of workers to justify presentation of an average.

Earnings of men and women who were employed as janitors, yarn winders, or card tenders fell within a 3-cent range; but in other occupations, usually more skilled jobs, men earned from 5 to 29 cents more an hour than women. On a national basis the only women workers with earnings exceeding $1.00 an hour were weavers, other than Jacquard loom; in the Border States and Great Lakes regions their earnings fell below the $1.00 level. A few women employed as mule spinners in New England or as dresser tenders in the Middle Atlantic region also averaged more than $1.00. On the other hand, nationally and in New England mills men received higher hourly rates of pay, usually above $1.10, in 12 out of the 35 jobs studied—in some of the maintenance jobs as well as in direct production work. In Middle Atlantic mills, men received these relatively high straight-time rates in over half of the jobs.

The variation in earnings for similar occupations between woolen and worsted mills was also usually greater for men than for women. However, the largest occupational group (weavers, other than Jacquard loom) was an exception—women earned 12 percent more an hour in worsted than in woolen mills, while men in worsted mills had only a 4-percent advantage. On a regional basis, the spread between earnings of men and women in this occupation was greater in woolen than in worsted mills.

Spinners are the second most important numerical group. Mule spinning is largely performed by men and ring frame spinning by women, and in both the woolen and worsted mills, mule spinners received the higher hourly pay. In the entire industry, men mule spinners averaged 2 percent more than ring frame spinners; for women workers the advantage was half as great. The contrast in worsted mills presents a more striking difference for men mule spinners—nationally and in the New England region, their earnings were 51 percent higher than for ring frame spinners.

VARIATION BY UNIONIZATION AND TYPE OF MILL

Unionization was rather widespread throughout the industry, with more than a third of the New England and Middle Atlantic mills operating under union agreements. About three-fifths of the plant work force in each region were in union mills, indicating that a substantial number of the organized workers were employed in large mills. Earnings of plant workers were influenced by both these factors (unionization and size of establishment), which appear to be interrelated. Union workers generally received higher wages than nonunion, and workers in plants with more than 250 employees had a wage advantage over those in smaller plants.

Type of mill must also be considered, inasmuch as fully integrated plants typically have a larger work force than the specialized spinning

or weaving mills. In addition, there are distinct product differentials. By and large, workers engaged in the manufacture of men's wear and those employed in the integrated mills had higher earnings than those making other types of products or working in the specialized plants. These generalizations do not, of course, hold true for each specific job.

To illustrate the differences in pay according to these factors, the average hourly rates for the three most important occupations (numerically), accounting for 23 percent of men and 35 percent of women plant workers, are shown in table 3.

TABLE 3.—*Average hourly rates for specified occupations in woolen and worsted mills, by selected wage factors, April 1946*

Wage factors	New England			Middle Atlantic		
	Weavers, other than Jacquard	Spinners, mule	Card tenders	Weavers, other than Jacquard	Spinners, mule	Card tenders
Men						
Regional average hourly rate	$1.25	$1.27	$0.84	$1.17	$1.18	$0.87
	Percent of regional average hourly rate					
Unionization:						
Union	103.2	102.4	102.4	105.1	104.2	104.6
Nonunion	96.8	96.9	96.4	91.5	97.5	95.4
Type of mill:						
Integrated	100.0	99.2	98.8	104.3	101.7	103.4
Yarn	----	104.7	114.3	----	98.3	95.4
Weaving	102.4	----	----	94.0	----	----
Size of mill:						
501 or more	103.2	104.7	100.0	105.1	106.8	101.1
251–500	101.6	101.6	106.0	102.6	101.7	111.5
8–250	93.6	93.7	94.0	92.3	88.3	92.0
Type of product: [1]						
Men's wear	102.4	107.9	101.2	105.1	116.1	98.9
Women's wear	100.8	96.1	97.6	96.6	93.2	108.0

Wage factors	New England			Middle Atlantic		
	Weavers, other than Jacquard	Spinners, ring frame	Winders, yarn	Weavers, other than Jacquard	Spinners, ring frame	Winders, yarn
Women						
Regional average hourly rate	$1.15	$0.88	$0.87	$1.11	$0.79	$0.81
	Percent of regional average hourly rate					
Unionization:						
Union	104.3	100.0	101.1	107.2	103.8	104.9
Nonunion	96.5	98.9	96.6	88.3	92.4	95.1
Type of mill:						
Integrated	100.9	100.0	102.3	104.5	110.1	108.6
Yarn	----	100.0	94.3	----	88.6	93.8
Weaving	99.1	----	92.0	92.8	----	90.1
Size of mill:						
501 or more	103.5	100.0	103.4	109.0	107.6	108.6
251–500	104.3	101.1	98.9	93.7	96.2	92.6
8–250	95.7	95.5	93.1	90.1	87.3	91.4
Type of product: [1]						
Men's wear	108.7	100.0	102.3	111.7	112.7	108.6
Women's wear	102.6	100.0	102.3	98.2	117.7	101.2

[1] Excluding blanketing and other woven goods.

Wage and Related Practices

Payment for extra-shift work, paid vacations, and health and insurance plans are prevalent practices in the woolen and worsted industry. Nonproduction bonus payments are less widespread. None of the industry's mills paid plant workers during time lost because of illness, and only 11 mills provided paid lunch periods.

Scheduled hours of work and shift operations.—In April 1946, the typical schedule of first-shift plant workers was 40 hours; at least a third of the mills had a longer workweek for both men and women—in these, 45 and 48 hours were almost equally prevalent. A few mills in all regions except the Border and Southeastern States reported still longer hours. Work schedules, though varying from the actual hours worked, indicate the significance of premium pay for overtime in workers' incomes.

Shift differentials present an additional income factor. First-shift employment accounted for nearly two-thirds of the industry's plant workers, the second-shift for about a fourth, and the third (or other) shift for 8 percent. Extra pay ranging as high as 5 cents an hour (but more frequently a smaller amount) was a common practice in over half of the mills operating second shifts. Workers receiving compensation for third (or other) shift work were paid over 5 cents but under 10 cents above the first-shift hourly rate, in all but 3 mills. A higher proportion of the mills operating three or more shifts provided extra pay than of those with two shifts—80 percent compared with 60 percent.

Paid vacations and health and insurance plans.—Over four-fifths of the mills studied offered their plant workers paid vacations after 1 year of service. The usual length of vacation was 1 week. Employers in over two-thirds of the mills studied also contributed entirely or partially to some type of insurance or pension plan. Life and health insurance were most prevalent; pension plans were rarely found.

Nonproduction bonuses.—Nearly two-fifths of the mills, including a larger proportion of Middle Atlantic and Southeastern than New England mills, gave their workers a bonus which was not related to output. A few mills had a profit-sharing, attendance, or other plan, and most mills paid a bonus at Christmas time. Averaged over all plant workers for the entire industry, these bonuses added only one-half cent to the workers' hourly pay. Regionally, such additions ranged from two-tenths of a cent in New England to 2.4 cents in the Southeast. In contrast to 6 out of 15 southeastern mills, only 37 out of 133 New England mills studied had a bonus policy.

Work Injuries

Work Injuries in 1946: Preliminary Estimates[1]

DISABLING WORK INJURIES during 1946 increased only 2 percent over 1945, according to preliminary estimates of the Bureau of Labor Statistics. It may be significant, however, that the change represents an increase over the total for 1945, whereas the totals for 1944 and 1945 each represented a decrease from the level of the preceding year. The volume of work injuries rose steadily and sharply from 1939 on and reached a peak of 2,414,000 in 1943. Although the estimate for 1946 is somewhat higher than that for 1945, it is, nevertheless, nearly 15 percent lower than that for 1943.

The number of disabling injuries which occurred during 1946 is placed at 2,063,100. This figure includes all deaths, all permanent impairments, and all temporary disabilities which kept employees from working for at least a full workday after the injury. The estimate includes disabilities arising from industrial diseases as well as accidental injuries. Although no attempt was made to make separate estimates for those caused by diseases, they are believed not to exceed about 5 percent of the total.

Fatalities are estimated at 16,500. This figure is identical with the revised estimate of fatalities in 1945. The sharpest increase occurred in the construction industry, from 1,700 to 2,200. An increase of 200 was estimated in wholesale and retail trade, to a total of 1,400 in 1946.[2] In manufacturing, deaths decreased by 200, to a total of 2,500. As has been the case for over a decade, the largest number of fatalities, 4,500, was charged to agriculture. This figure is identical with that for 1945.

The number of permanent total disabilities, 1,800, remained unchanged from the 1945 level. But the number of permanent partial disabilities increased to 93,100, or about 6 percent.[3] The industry group with the largest number of these permanent impairment cases, 28,200, is manufacturing.

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[1] Prepared in the Bureau's Industrial Hazards Division by Max D. Kossoris and Frank S. McElroy

[2] The original 1945 estimate of 800 appears to have been too low by 400 cases.

[3] The 1945 estimate of 82,700 appears to have been too low. Later data indicate that a more accurate estimate would have been about 88,100.

The manufacturing group also accounted for the largest number of temporary total disabilities, 510,600 out of a total of 1,951,700 for all industrial groups combined. Nevertheless, this figure represents a decrease of about 8.5 percent from 1945, largely as a result of an estimated decrease in employment of about 6.5 percent.

Only three of the major industrial groups—manufacturing, railroads, and miscellaneous transportation—showed decreases from their 1945 levels. The 19-percent decrease of disabling injuries in railroading far exceeds the estimated decrease in employment of about 4 percent. Similarly, the 5-percent decrease in miscellaneous transportation is about three times the employment decrease, estimated at about 1.6 percent.

Every other major industrial group shows increases over its 1945 level, usually because of increases in employment. In agriculture, the increase of injuries was nearly 6 percent; in mining and quarrying, about 2 percent; in construction, nearly 35 percent; public utilities, 26 percent; trade, 12 percent; and the large group of services, government, and miscellaneous industries, nearly 5 percent.

The time lost during 1946 because of these injuries is estimated at 46,809,800 days—enough to provide full-time employment for 156,000 workers. In other words, had these injuries been prevented, the country could have had the production of another 156,000 workers in our labor force. The comparative time loss for 1945 was 41¼ million days, representing full-time employment for 137,000 workers.

These estimates of actual time loss, however, take no account of losses in future years which are chargeable to the deaths and permanent impairments caused by the 1946 injury toll. If standard time charges are made for these classes of disability, the economic time loss occasioned by the 1946 injuries reaches a total of 237,003,100 days. This is the full-time employment equivalent of 790,000 workers. The corresponding 1945 figures are 218 million employee-days, equivalent to 725,000 full-time workers. Although the total of disabling injuries increased only about 2 percent over 1945, the estimates show increases in actual time loss of 13 percent and in economic time loss of nearly 9 percent.

Estimated number of disabling injuries during 1946, by industry group

Industry group	All disabilities		Fatalities		Permanent total disabilities		Permanent partial disabilities		Temporary total disabilities	
	Total	To employees	Total	To employees	Total	To employees	Total	To employees	Total	To employees
All groups	2,063,100	1,613,900	16,500	11,700	1,800	1,400	93,100	73,200	1,951,700	1,527,600
Agriculture [1]	323,600	75,100	4,500	1,100	400	100	16,200	3,700	302,500	70,200
Mining and quarrying [2]	83,800	79,400	1,300	1,200	200	200	3,700	3,500	78,600	74,500
Construction [3]	151,100	103,400	2,200	1,600	300	200	3,900	2,700	144,700	98,900
Manufacturing [4]	541,500	532,400	2,500	2,400	200	200	28,200	27,700	510,600	502,100
Public utilities	25,500	25,500	400	400	(5)	(5)	600	600	24,500	24,500
Trade [3]	333,100	266,600	1,400	1,200	100	100	8,000	6,400	323,600	258,900
Railroads [6]	76,000	76,000	800	800	300	300	5,300	5,300	69,600	69,600
Miscellaneous transportation [3]	132,800	114,000	900	700	100	100	7,600	6,500	124,200	106,700
Services, government, and miscellaneous industries [3]	395,700	341,500	2,500	2,300	200	200	19,600	16,800	373,400	322,200

[1] Based on fragmentary data.
[2] Based largely on Bureau of Mines data.
[3] Based on small sample studies.
[4] Based on comprehensive survey.
[5] Less than 50.
[6] Based on Interstate Commerce Commission data.

Cooperatives

Developments in the Consumers' Cooperative Movement in 1946[1]

To COOPERATORS in the United States, the outstanding event of 1946 was the biennial Cooperative Congress, which made far-reaching changes in the structure of the organized cooperative movement in this country. The year was also notable for the substantial progress in the fields of cooperative housing and medical care; for the unusually large number of new branches opened or new departments added by established associations; and for the organization of national federations of cooperative housing associations, of cooperative medical-care associations, and of students' cooperatives, as well as of an international association to carry on trade in petroleum products among the cooperative movements of the various countries of the world.

There was continuance and expansion of previous efforts toward closer relationships with other groups, such as labor, churches, and farmers. Particularly successful have been the moves in the direction of labor, which are now paying dividends in the active support of cooperatives by unions and their members in many places.

Developments Among the Local Associations

As usual, many new distributive cooperatives were started during the year, and an unusually large number of associations opened new branches or added new departments. Electrical-appliance departments were among the most popular; this move was accelerated by the line of "co-op label" products in this field being offered by National Cooperatives and its regional members. According to report, some 2,300 local associations were dealing in electrical appliances by early 1947, but only 23 percent were carrying a full line. Other new departures included departments for building supplies, lumber yards, coal yards, a carpenter shop, general stores, gasoline stations, cold-storage lockers, dry-cleaning service, watch-repair service, a dry goods

[1] Prepared by Florence E. Parker, of the Bureau's Labor Economics Staff. A more detailed report will appear later, in bulletin form, including developments among the federations, education, recreation and publicity, relationships with other groups, international cooperative relationships, legislation and court decisions affecting cooperatives, and taxation of cooperatives.

store, and a hardware store. One local association bought a sawmill, another an ice-cream plant, and a third a small petroleum refinery for heavy fuels. One association became an agency for the sale of small airplanes. In Connecticut a cooperative store association opened what was said to be the first cooperative gasoline station in that State. On the Pacific Coast there seems to be some tendency on the part of local cooperatives to let out certain departments (especially the meat department) to private concessionnaires.

Urban associations.—The year 1946 saw some advance in the spread of cooperation in urban areas. In Chicago, six existing associations had by August 1946 voted to become branches of the city-wide Chicago Consumers' Cooperative, formed in 1945. Each thereby became a "district assembly" of the association. Two others were reported as in process of formation. The first supermarket of the new association was opened in November 1946, and early in January 1947 the leasing of a site for a second was announced. The association's membership in September was stated to have passed 1,800.

Other cities were reported to be interested in the Chicago procedures, one of which is a $5 nonreturnable membership fee, used to defray the expense of a paid staff of organizers. "Another is the city-wide enlistment of members, with the gradual development of natural centers for intensive organizational work. The latter feature permits people who are sufficiently interested in co-ops to invest and participate before there is immediate prospect of a store in their neighborhood and create a common pool of capital for use throughout the city." [2]

In the Twin Cities, membership meetings approved a proposed merger of Cooperative Services (Minneapolis) and Co-ops, Inc. (St. Paul), under the name Twin Cities Cooperatives Services. The Minneapolis group operates several automobile service stations and a feed, coal, and lumber yard; its food store was sold to the St. Paul association early in 1946. The latter was already operating five grocery stores and had just purchased a bakery to supply its stores. In Cheyenne, Wyo., the gas cooperative opened a supermarket in the spring of 1946. The two Berkeley, Calif., cooperatives (one operating a grocery store and the other a gasoline station and hardware and appliance store) merged to form the Berkeley Cooperative Center, with a combined membership of about 1,400.

In New York City, Consumers Cooperative Services, operating seven cafeterias and four grocery stores, reported the largest volume of business in its 26-year history ($1,373,424) in 1945–46 and an increase in membership from 5,536 to 7,130. Its plans call for an

[2] Co-op News (Chicago), November 20, 1946.

eventual chain of 20 stores within a 10-mile radius of its warehouse.

Greenbelt Consumers Services, in Greenbelt, Md. (within the metropolitan area of Washington, D. C., where most of its members are employed) had a business of $1,162,851 in 1945 and expected a considerable increase in 1946. Membership also rose from 1,820 to nearly 2,000 in the first 6 months of 1946. The association is raising money for a new cooperative shopping center, to house a food market, restaurant, soda fountain, bakery, bowling alley, game room, and nursery. The association already operates all the other business in town (theater, barber shop, beauty parlor, and drug store). It also operates a "shuttle-bus" connecting with the interurban bus line. In the period 1940–45 the sum of $79,294 was returned to the patrons in savings.

SPECIAL TYPES OF COOPERATIVES

Housing Associations

Progress of local associations.—Reports received by the Bureau of Labor Statistics show that housing cooperatives are being formed all over the country. Especially active are veterans for whom the housing situation is very difficult but who have had priority above others in the building field and have the advantage of Government loans and guaranties. In some places veteran groups are undertaking the development of outlying tracts, including the installation of utilities, streets, etc.; in others, the association contemplates taking over existing buildings for remodeling. One group is even sponsoring a homestead development in Alaska. In the District of Columbia a veterans' cooperative was the successful bidder for Naylor Gardens—a 475-unit development built by the Government during the war.

Types of dwellings planned range all the way from apartments, through single-family dwellings on city lots, to subsistence homesteads with land ranging up to several acres. In one case a students' cooperative composed of veterans is erecting prefabricated houses on land owned by the university.

Numerous housing developments on the cooperative plan are being sponsored by labor groups. In Washington, D. C., printing-trades workers are planning an apartment-house project. In South Bend, Ind., members of a local of the UAW-CIO took the initiative in a housing cooperative to build single-family units. Employees of the Omaha district of the Corps of Engineers are reported to have initiated a contemplated suburban community of 600 homes; so detailed were their plans that they even included space for a helicopter landing field. Racine, Wis., is the scene of a housing project in which members of AFL and CIO unions, as well as the local consumers' cooperative, are participating.

In most cases a single project is planned, with membership limited to the prospective residents in the project. However, an identical type of open-membership technique has been adopted by two housing associations, one in New Haven, Conn., and the other in Washington, D. C., entirely independently of each other. In both cases a general open-membership cooperative acts as sponsoring and initiating agency for specific housing projects. Individuals desiring to reside in developments sponsored by the parent association must first join the latter. Ownership and control of the specific project eventually is turned over to a second association, composed entirely of residents of the project. Such an arrangement affords membership to many persons who do not themselves need living accommodations but are desirous of helping to further the cooperative housing plan, while at the same time it insures final control to the tenant-members of the conditions under which they live.

Numerous mutual housing associations are reported, formed to take over completed developments. In all cases that have thus far come to the attention of the Bureau, these intend to operate on the Rochdale principle of retention of title by the association, with the member receiving a lease to the dwelling he occupies. Of the permanent housing projects built under the defense housing program by the Federal Government, with funds supplied under the Lanham Act, eight were earmarked for "mutual ownership" after the war. These included three in New Jersey, one in Pennsylvania, one in Ohio, one in Indiana, and two in Texas.

Under the plan worked out, if the residents of the project desire to purchase the dwellings, they are required to form a nonprofit mutual home ownership corporation. The corporation is then given a 2-year lease, with option to buy at the end of that time (if it has demonstrated its ability to operate the property efficiently). At the end of December 1946, two corporations—one in South Bend, Ind., and the other in Dayton, Ohio—had served their 2-year probationary period and exercised their option. Appraisal of the property had been made and negotiations for purchase were in progress. The other six projects were being run by ownership corporations, but as their 2-year leases had not yet expired, no further step could yet be taken.

Federally built projects financed by other funds have also been put up for sale by the Defense Homes Corporation of the Federal Housing Agency. Naylor Gardens Projects, already mentioned, was one of these. In August 1946 it was reported that a mutual housing association, formed for the purpose of bidding in the planned village of Greenbelt, Md., had obtained 200 members toward the 472 (25 percent of the total 1,887 dwellings) required in order to bid; by the end

of the year more than half of the residents had indicated their desire for ownership. In Detroit it was reported that a move was on foot to form a mutual housing association to purchase Norwayne Homes there, with 50 percent of the tenants in favor of purchase.

In the Twin Cities of St. Paul and Minneapolis an unusual housing development is under way. A complete village of 1,200 acres on the shore of a lake has been planned and is being built through the efforts of three cooperators, of whom one owned part of the necessary land, one was an architect, and the third was a contractor. In this project the resident-members come into a going concern, buying their lots and subscribing for shares. Each house will be financed individually, by the member. The village is to be developed section by section, as the lots are taken. The three developers each have one vote and hold all of the preferred stock. They will retain control until the project is under way, then surrender their votes "one at a time—to each group of 500 home owners as the village grows." In other words, not until 1,500 residents have moved in will the members have complete control of the project. Speculation is to be prevented by association control over the sale price, which is to be arrived at by an appraisal board of three (one representing the owner and one the association, and one the neutral outsider).

Federations.—A conference of housing cooperatives, held in Chicago in May 1946, authorized the formation of the National Cooperative-Mutual Housing Association. Organization was completed just before the national Cooperative Congress in September 1946, and the association was represented at that meeting. It is expected that the federation will turn its energies to the exchange of experience, provision of technical service, accounting, training of project managers, etc., leaving the handling of building materials to National Cooperatives (the commodity organization) and its regional wholesales. The housing section at the Cooperative Congress presented a resolution, which was adopted, urging among other things that National Cooperatives establish a strong division for the procurement of building supplies,[3] and that the National Cooperative Finance Association organize immediately a program to make mortgage credit available to cooperative and mutual housing associations.

Structurally, the national housing association is expected to be a federation of regional associations, which will in turn be composed of State federations of local associations. Already one regional has been formed by the housing cooperatives in Indiana, Michigan, and Minnesota, under the name of North Central States Housing Association.

[3] National Cooperatives stated in a letter to the Bureau of Labor Statistics, dated December 12, 1946, that it was already getting under way with the expansion of its facilities in this field.

Provision of Medical and Hospital Care

Progress of local hospital associations.—From the Mississippi River westward, the spread of cooperative provision of medical care was outstanding in 1946. The greatest advance was in the formation of hospital associations. At the end of 1945 there were in operation six cooperative hospitals—one each in Florida, Kansas, Minnesota, and Texas, and two in Oklahoma. By the end of 1946, reports indicated that at least 9 cooperative hospitals were in operation and 13 associations were known to have been formed and under way. At least 22 others were in process and some of these had received charters, but data as to their exact status at the close of the year were not available.

In October 1946 ground was broken in Sandpoint, Idaho, for the first unit of a $100,000, 17-bed community hospital, on a 3½-acre plot near Lake Pend d'Oreille. The 725 members hoped to have it in operation by the spring of 1947.

Of the other associations concerning which progress reports are available, the association at Ely, Minn., reported pledges of $38,000 from 300 persons in October; it planned to remodel a former school building. At Fosston in the same State, the association had incorporated and elected its board of directors; no data were available as to membership or funds. In Greenbush, Minn., money was being raised for a 20-bed cooperative hospital. The hospital at Two Harbors, which started operation as a cooperative in November 1944, announced in 1946 its intention of establishing a small branch hospital at Grand Marais, 85 miles eastward on the north shore of Lake Superior.

The purchase of a 10-bed hospital by a cooperative association with members in two counties in Missouri—the first of its kind, known to the Bureau, in that State—was reported at the end of the year.

In South Dakota, cooperators at Leola had raised $18,000 toward the erection of a 20-bed building after only a week's work in November 1945; no later report has been received. In Winner, in October 1946, the Farmers' Union and local farmers' cooperatives were reported to be sponsoring and supplying organizing funds for a $100,000 cooperative hospital. The organization, Rosebud Cooperative Hospital, Inc., had already been formed, and 243 paid-up members, each contributing $100, had been obtained.

In Texas, over a score of hospital associations had been formed under a 1945 law authorizing their formation in places of less than 2,500 population. At Friona, by September 1946, 500 persons had joined a cooperative hospital association and had paid in $100 each toward the construction of a 30-bed hospital. At Olton plans were being made to remodel the building formerly used as a county courthouse. Construction of a hospital was under way at Rising Star,

where a membership of over 700 had been obtained. The cooperative wholesale at Amarillo has been giving some assistance to these groups.

In most places the hospitals have been organized in rural districts which have previously had little or no medical or hospital facilities. In Washington State, however, urban industrial workers as well as farmers have been behind the organizing drive that has been going on for the past 18 months. The regional cooperative wholesale, Pacific Supply Cooperative, has had a full-time "cooperative hospital field counselor" at work throughout Idaho, Oregon, and Washington. In Seattle, Group Health Cooperative of Puget Sound was formed in 1946, with widespread community support including that of various local labor organizations, State and local granges, and cooperative associations. Among the labor organizations were the boilermakers, milk-wagon drivers, aircraft mechanics, and Renton Central Labor Council. The members of the 1946 board of directors of Seattle Group Health included a representative each of the aircraft mechanics and boilermakers, a representative from each of four local consumers' cooperatives (one a students' cooperative at the State University), two Grange representatives, and a local businessman.

In November the association, which had originally planned to buy a surplus Government hospital at Renton, announced that it had merged with a doctor-controlled organization, the Medical Security Clinic. The latter was operating a 60-bed hospital and a large downtown clinic, with a staff of 18 physicians, and was providing prepaid service for some 7,500 members. Not altogether satisfied with private group practice, the clinic management had sent its manager to attend the conference of health cooperatives at Two Harbors, Minn., in August 1946.

His report and the months-long conferences that followed, with representatives of Group Health Cooperative, resulted in the decision to become part of the latter group.

Olympic Cooperative Hospital Association, at Sequim, and Kitsap Cooperative Hospital Association, at Bremerton—both on the Olympic Peninsula—were negotiating for hospital buildings at the close of the year, and a new association had been formed at Deer Park.

In Oregon the Community Hospital Association in Hermiston reported over 250 members in October, and the Salem Community Health Association sponsored by the Farmers Union had about 500 members. At Newberg an organizing drive was getting under way late in the year.

Cooperators in Wisconsin have made several attempts to organize cooperative hospitals, but have been blocked by the Wisconsin law which reserves to the medical profession the right to conduct prepaid group plans. The Wisconsin Association of Cooperatives—a State-

wide organization of 214 cooperatives of all types (consumers', producers', and REA associations)—has pledged its support to an effort to amend the law so as to permit the formation of consumers' cooperative medical-care associations.

Prepaid medical care.—Group Health Association, Washington, D. C., which operates a clinic and pharmacy and which originally provided service for Federal employees only, early in 1946 adopted the open-membership principle on a "group basis," accepting Negroes as well as whites. Among the new groups reported as admitted under the new policy were employees of the local consumers' cooperative (an association operating 6 stores in the District of Columbia and Virginia), those of the Farm Bureau insurance companies, and those of the National Council of Farmer Cooperatives. The association also purchased a site of some 20,000 square feet on which it plans to erect a medical center.

Health insurance.—Among the associations providing cash benefits to meet the cost of medical and hospital care, Group Health Mutual of St. Paul, Minn., had a total membership of about 45,000 persons in April 1946. It added to its previous services a combination plan with benefits ranging from $5 to $200 for surgical cases, obstetrical benefits up to $60, ordinary hospital benefits up to $4.25 per day, and special hospital benefits up to $50. Among the new groups being served by the end of the year was the personnel of Pacific Supply Cooperative, in Idaho, Washington, and Oregon.

Medical-care federations.—Although cooperative medical care is still in its infancy, steps toward federation have already been taken. In the spring of 1946, six associations on the Pacific Coast formed the Northwest Cooperative Hospital Federation, to coordinate their educational and promotional work.

A Nation-wide conference of health cooperatives was held in August 1946, at which were present delegates not only from medical-care associations but also from labor and farmer groups interested in the provision of medical care. This conference authorized the formation of a national association, the purpose of which would be "to engage in educational and other activities for the promotion of the health and well-being of its membership and the public, and to carry on the following activities: (1) Educational, (2) advisory service in legal, management, technical, and organizational fields, (3) public relations and legislation, and (4) research in the field of medical economics." Adoption of articles of incorporation and bylaws for the new organization, the Cooperative Health Federation of America, was announced at the Cooperative Congress in September. At the same time a labor committee was formed, with headquarters in Washington, D. C., to foster the formation of prepayment medical-care plans; a small exec-

utive committee (including a representative of the medical profession) was elected to further the federation's work. A drive is to be made to obtain the affiliation of "all prepaid medical-care plans in which consumers have effective control." The previous federation, Group Health Federation of America,[4] formed in 1940, disbanded and turned its assets over to the new organization.

Noncommercial Federations

Congress of the Cooperative League.—The most important cooperative event of the year was the national Cooperative Congress, held in September. This was a joint congress of the Cooperative League (educational body), the Cooperative Finance Association, and National Cooperatives (wholesale association). Its deliberations covered the whole range of cooperative effort in the consumer field; its sessions dealt with production, promotion, insurance, distribution, finance (including credit unions), housing, health, recreational, education, women's activities, young people's activities, personnel, relations with various groups (labor, churches, urban-rural, etc.), as well as international relationships and activities.

Among the more important actions of the congress were the following: (1) The transfer from the Cooperative League to National Cooperatives of employee training, general educational work, and publicity; (2) the transformation of the Cooperative League into a national organization, which would be a federation of national organizations in various branches of the consumers' cooperative movement (distribution of commodities, credit, electricity, insurance, medical care, housing, and recreation), to carry on research, statistical, and public-relations work; and (3) the passage of resolutions (*a*) urging the establishment of an international cooperative petroleum association, (*b*) requesting the International Cooperative Alliance to establish a branch in the United States, (*c*) declaring the "full and unqualified support of the entire United Nations effort," and (*d*) favoring the establishment of a permanent Inter-American cooperative educational institution with branches in North and South America. A meeting of the board of directors of National Cooperatives, previous to the Congress, established as policy that in future all production on a national scale is to be carried on by National Cooperatives. Action taken by the congress on other specific subjects is here noted under such subjects.

A new association, Arizona Cooperative Association, whose first activities, it is reported, will be in writing insurance and making small loans, was admitted to membership in the League in 1946.

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[4] It accepted into membership doctor-controlled as well as consumer-controlled plans.

Problems of Organization and Structure

ON THE NATIONAL LEVEL

A proposal for the merger of the Cooperative League, National Cooperatives, and the National Cooperative Finance Association has been under consideration for several years. The boards of the three organizations had approved a single executive for the three and established a joint committee to work out the details of consolidation. At the national Cooperative Congress in September 1946, after many protracted meetings during the year, the committee presented a surprise report and recommendations which differed completely from previous plans. Briefly, it proposed that, instead of a merger, National Cooperatives would become the national organization for the distributive branch of the cooperative movement, combining commercial activities with educational and publicity work and therefore taking over Rochdale Institute, the Co-op Magazine, Cooperative News Service, and national employee training, all of which had previously been departments or functions of the League. The latter (which celebrated its thirtieth birthday in March 1946) would carry on research, compile statistics and other information, and do public-relations work on an over-all basis. It would become the national organization of all branches of the consumers' cooperative movement in this country—distributive, electricity, credit, insurance, housing, medical care, etc.

The report and recommendations were accepted by the congress, after considerable discussion.

Unlike the situation in many European countries, in the United States each branch of the cooperative movement has developed independently. The REA cooperatives, credit unions, student cooperatives, medical-care associations, and distributive associations each have their own national federation. Those in the field of housing, medical-care, and provision of meals and rooms for students have only recently been formed and have as yet no great accomplishments to their credit.

The Credit Union National Association ("CUNA") became a fraternal member of the Cooperative League in 1939, and the Cuna Supply Cooperative became a full member in 1942. The affiliation of the latter (a commodity organization) probably will hereafter be through National Cooperatives. The new federations of students' associations and of housing and medical-care cooperatives undoubtedly will affiliate with the League, but no relationship has as yet existed with the REA cooperatives; their affiliation has still to be won. No national insurance federation exists, though some of the most powerful

of these associations have been consistent financial supporters of the the League.

It appears, therefore, that the solid underpinning of the League at present consists of only the distributive movement and these insurance organizations. Support from the other branches either consists largely of good will or has still to be won. Undoubtedly the new structural plan offers a much wider scope for the League than before, if the latter is successful in rallying to its banner the various service branches of the movement.

ON THE REGIONAL LEVEL

The 1946 annual meetings of Eastern Cooperative League and Eastern Cooperative Wholesale approved a committee draft of a constitution and bylaws of a proposed consolidation of the two that has been under way for some time. The name of the new organization is to be Eastern Cooperatives, Inc.

In the territory of the above organization, which serves local cooperatives on the whole eastern seaboard as far south as Virginia, a move among some of the New England associations to secede and form a separate wholesale for that region was under study during 1946. The report of a committee, appointed in conformity with instructions from a membership meeting in February, was laid before a special meeting held in September 1946. The committee recommended the establishment of a separate wholesale. Debate at the meeting covered the possible deleterious effects of such a move on the unity of the cooperative movement in the East, and the difficulty of financing a new wholesale. The meeting decided to postpone action until March 1947, with an enlarged committee gathering more facts in the meantime.

Among the district federations, Cooperative Services, Bruce Crossing, Mich. (handling petroleum products), voted to merge with Copper Country Cooperative Enterprises (a fish-marketing organization that evolved out of a self-help cooperative started during the depression). This action caused some threats of withdrawal of associations that were members of Cooperative Services; no information is available to indicate whether action was actually taken.

Labor Laws and Decisions

Recent Decisions of Interest to Labor[1]

Fair Labor Standards Act

PORTAL-TO-PORTAL CLAIM OF MT. CLEMENS POTTERY WORKERS DENIED

THE UNITED STATES Supreme Court, in *Andersen* v. *Mt. Clemens Pottery Co.*,[2] ruled that time spent by employees upon an employer's premises in preliminary "make ready" activities, and time necessarily spent on the premises in walking to work after the time clock is punched, should be included as "working time" under the Fair Labor Standards Act, if such time is not so trivial as to fall within the so-called "de minimis" rule.[3] Because of insufficient evidence bearing on the actual time spent in such activities, the Supreme Court returned the case to the Federal district court where it had originated, instructing that court to determine the amount of necessary walking time from time clocks to work sites and the time consumed in the preliminary make-ready activities. The Supreme Court further directed that in determining the damages the district court should apply the "de minimis" rule in the light of "the realities of the industrial world."

On the basis of these instructions the Federal district court in question found that employees of the Mt. Clemens Pottery Co. were not entitled to back pay and damages for the make-ready and walking time in question. The district court regarded the total time actually spent, outside the hours for which they were paid, in any day, in all the activities which the Supreme Court held to be work, as so trivial as to be disregarded under the "de minimis" rule. Preliminary activities such as putting on aprons, overalls or gloves, removing shirts, and turning on machinery switches, the court found, consumed not more than 5 minutes for a few employees and not more than 3 minutes

[1] Prepared in the Office of the Solicitor, U. S. Department of Labor. The cases covered in this article represent a selection of the significant decisions believed to be of special interest. No attempt has been made to reflect all recent judicial and administrative developments in the field of labor law or to indicate the effect of particular decisions in jurisdictions in which contrary results may be reached, based upon local statutory provisions, the existence of local precedents, or a different approach by the courts to the issue presented.

[2] 66 Sup. Ct. 1187, June 10, 1946. See Monthly Labor Review, August 1946 (p. 249).

[3] "De minimis non curat lex" (the law cares not for small things). The court, in other words, was directed to disregard insignificant amounts of walking time and preliminary activities.

for the others. The court also indicated its belief that some of these activities were performed primarily for the benefit of the employee. Other "make-ready" activities were found to have been performed during time for which the employee had already been paid. As to walking within the plant, the lower court interpreted the Supreme Court's decision as limiting walking time which is to be included in working time to not more than 2 trips a day between the time clocks and the workbench. The employees had contended that 4 trips a day should be included, namely: going to the workbench in the morning, going to and returning from lunch, and leaving the workbench at the end of the day. The time spent in walking twice a day varied from 1.8 minutes in one department to 6.2 minutes in another. The court, rejecting a contrary contention of the employer, used the total of the time spent in walking and that consumed in preliminary activities, rather than the two separately, to determine whether the uncompensated work time was too trivial to notice under the "de minimis" rule. Adding the time spent in preliminary activities and the walking time, the court held the total time spent in both was so trivial as to be de minimis, when only two periods of walking were included in the computation.

In addition the court held that if its interpretation of compensable walking time should prove to be in error, the employees in this case should not be able to recover for any period of time prior to the date of the Supreme Court's decision in the Mt. Clemens case (June 10, 1946) because of the doctrine of retroactivity in alleviation. It ruled that when, as in this case, an employer has made every reasonable effort to comply with the Government agency's opinions, administrative regulations, and court decisions, he should not be bound by a decision changing the basis of computing the workweek, except as to future activity. In this case, the court said, the defendant was justified, on the basis of then existing opinions and decisions, in not computing less than 20 or 25 minutes per day as spent in walking time and preliminary activities. The court made it clear, however, that the ruling in this case is not to be understood as holding that all portal-to-portal suits are to be dismissed. In the words of the court: "There may be, and perhaps are, many instances where walking and the preliminary activities time consumed is of such an amount as to call for compensation that the worker is not now receiving. But this is not one."

ENGAGEMENT IN COMMERCE

In three recent suits for overtime compensation under the Fair Labor Standards Act, the principal issue involved was whether or not the employees bringing the action were "engaged in commerce or in the production of goods for commerce" within the meaning of the act.

Guards in plant manufacturing ordnance under cost-plus-fixed-fee contracts.—Guards employed by a contractor who produced explosives, which were wholly owned by the United States and were shipped across State lines by order of the United States, were held by a Federal district court to be engaged in commerce within the meaning of the act.[4] The employer contended that the property was shipped across State lines for the convenience of the Government and its transportation therefore was not interstate commerce "but a mere administrative act of the Government" in the exercise of its sovereign power in the conduct of the war. The court, however, ruled that there is nothing in the Fair Labor Standards Act which would support a distinction between employees whose activities affect ordinary commercial interstate commerce and those whose activities relate to the movement of goods for the convenience of the Government.

Timekeeper on a local housing project.—A timekeeper-paymaster employed by a subcontractor on a local housing project was held not to be engaged in commerce even though his employer was performing similar work in several other States.[5] The court applied the principle that it is the nature of the employee's duties, and not the character of the employer's business, that is determinative of whether the employee is "engaged in commerce." As such the court found that the employee's duties were essentially local, even though he occasionally signed receipts for materials received from outside the State, since he had no real connection with the materials until they had come to rest with the employer—the ultimate consumer—and had thus lost their interstate character.

Warehouse employees of retail and mail-order business.—Reversing a lower court decision, and applying a principle established in previous Federal cases, a circuit court of appeals held [6] that employees of a warehouse serving a Nation-wide retail and mail-order business—employed solely in loading, checking, and dispatching retail deliveries to customers, and repairing and servicing merchandise for such customers—are not engaged in commerce within the meaning of the act and are specifically exempt by that provision which excludes persons employed in a local retailing capacity. The court pointed out that a prior United States Supreme Court decision,[7] which held that a warehouse servicing a chain of retail stores has the status and function of a wholesaler, does not require a ruling that all employees in such a warehouse are covered by the act. Employees that, as in this case, are engaged solely in furthering the activities of retail stores, are not within the purview of the act.

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[4] *Moehl* v. *E. I. DuPont de Nemours & Co.* (U. S. D. C. N. D. Ill., Jan. 10, 1947).
[5] *Baine* v. *J. L. Murphy, Inc.* (N. Y. City Ct., Jan. 4, 1947, 117 N. Y. L. J. 41).
[6] *Montgomery Ward & Co.* v. *Antis* (U. S. C. C. A. (6), Jan. 13, 1947).
[7] *Phillips* v. *Walling* (1945; 324 U. S. 490).

AGRICULTURAL EXEMPTION

Fireman employed in greenhouse.—An employee hired to fire boilers used in a wholesale florist business was held to be exempt from the Fair Labor Standards Act under the provision which excludes any employee engaged in agriculture.[8] The court rested its decision on the broad definition of "agriculture" in the act, which, it reasoned, covered much more than what might be called ordinary farming activity.

INTERSTATE COMMERCE ACT EXEMPTION

Manufacturer of railroad freight doors.—Two parties had an agreement with an interstate railroad by which the former were to manufacture grain doors for freight cars. The two parties hired and fired their workmen, determined hours of work and rates of pay, and were in immediate supervision of the work. They performed no similar work for others. The railroad, however, determined the number of workmen to be employed in the grain-door yards, established the volume of work, and assumed the risk of economic fluctuation in wages. Upon such facts, a Federal district court held[9] that both the two parties and their workmen were employees of the railroad, and as such were exempt from the Fair Labor Standards Act, under the section excluding "any employee of an employer subject to Part I of the Interstate Commerce Act."

COMPUTATION OF REGULAR AND OVERTIME RATES

A number of recent decisions concerned the problem of computing regular and overtime rates of pay under various circumstances.

Night and day differentials.—A Federal district court at New York City upheld a collective-bargaining agreement which provided for a straight-time hourly rate of $1.25 for hours worked between 8 a. m. and 5 p. m., and a rate of $1.87 for all other time, even though this contract did not conform to the standards ordinarily applied by the Wage and Hour Division.[10] The employees, who were bringing suit for overtime, argued that the $1.87 rate constituted a rate differential for night work rather than time-and-a-half overtime. The court, however, refused to accept this contention, pointing out that it is not always necessary that the time-and-a-half rate go into effect at the chronological point 40 hours after the workweek is begun. The real purpose of the differential was to place a penalty on work in exccess of 40 hours, and not to place a premium on night work; thus it was within the spirit of the act, the court ruled.

[8] *Damatz* v. *Pincheck* (U. S. C. C. A. (2), Dec. 23, 1946).
[9] *Walling* v. *McKay* (U. S. D. C. D. Nebr., Dec. 16, 1946).
[10] *Addison* v. *Huron Stevedoring Corp.* (U. S. D. C. S. D. N. Y., Jan 6, 1947).

Wage premium plan.—A circuit court of appeals in New York ruled that a company, in computing overtime compensation for its hourly paid employees, must include in the regular rate the quarterly payments regularly received by such employees under a wage premium plan which allotted to each employee, according to his length of service, dividends upon imaginary shares issued to him.[11] The court rested its holding on a decision of the United States Supreme Court [12] in which it was held that "the regular rate by its very nature must reflect all payments which the parties have agreed shall be received regularly during the workweek, exclusive of overtime payments. It is not an arbitrary label chosen by the parties; it is an actual fact." The court pointed out that, while it was true that the directors could skip the dividend, it was not likely that they would do so in order to avoid paying the bonus, and that as a matter of fact not one payment had been skipped in 9 years.

Inclusion of overtime in daily wage.—The Supreme Court of New Mexico recently considered an employment contract which provided (1) that a daily wage rate for 12 hours' work would include all compensation for overtime, (2) that an extra half day's wages should be paid for all work over 12 and under 17 hours, and (3) that an extra day's wages would be paid for all work over 17 hours.[13] The court held that this contract did not violate the Fair Labor Standards Act, relying on the rule that a contract is consistent with the act if it provides for (1) either a stated hourly rate for regular work, or an upper limit on the total number of hours to be worked for a fixed salary, and (2) an express provision that overtime should be paid for at time-and-one-half the regular rate. The court found both of these essential elements present in this contract.

Veterans' Reemployment

Veterans with incompleted probationary period.—It was recently held [14] that the reemployment benefits of the Selective Training and Service Act do not apply to a veteran who, prior to his induction, failed to complete the probationary period required by a collective-bargaining agreement between the employer and the union. The court ruled that the probationary nature of his employment made his position a "temporary" one within the terms of the act, and his employer was therefore not required to reinstate him.

[11] *Walling* v. *Garlock Packing Co.* (U. S. C. C. A. (2), Jan. 16, 1947).
[12] *Walling* v. *Youngerman-Reynolds Hardware Co.* (1945; 325 U. S. 419, 424).
[13] *Watson* v. *Hightower* (N. Mex. Sup. Ct., Jan. 13, 1947).
[14] *Lesher* v. *P. R. Mallory & Co.* (U. S. D. C. S. D. Ind., Jan. 9, 1947). To the same effect, and by the same court: *Estes* v. *P. R. Mallory & Co.* and *Kuhn* v. *P. R. Mallory & Co.*

The same court considered a variation of this problem in another recent case,[15] in which the veteran, who had not completed his probationary period before induction into the armed forces, was reinstated upon application. A question arose as to whether he was entitled to count that period of his probation which he had actually served. The collective-bargaining agreement permitted an accumulation of probationary time (6 months was required) within a 2-year period, but the veteran had been in the service for more than that time. After a showing that the veteran had, prior to his induction into the armed forces, been laid off by the employer because of a reduction in force, the court held that the employer was not required to consider the veteran's prewar employment in fixing his seniority status.

Right of veteran to benefits other than reemployment.—When, under the terms of a union contract, the right to vacation pay is based upon actual employment in the employer's plant for a certain period of time, a reinstated veteran who had not accumulated the requisite amount of service prior to his induction is not entitled to vacation pay by virtue of section 8(c) of the Selective Training and Service Act. This section provides for the restored veteran's participation in "insurance or other benefits offered by the employer pursuant to established rules and practices relating to employees on furlough or leave of absence * * *." In so holding,[16] a Federal district court pointed out that a veteran's service in the armed forces may not be included in computing time spent in the employer's service, if the union agreement required "actual" service.

Conduct of veteran as showing intention to return.—In two cases, involving the same employer, the question raised was whether or not the conduct of the veteran indicated that he was making application for reinstatement, and if the employer who failed to reinstate him at that time was therefore liable for damages during the period that the veteran remained unemployed.

In the first of these cases[17] the evidence showed that the veteran had asked to be reinstated in his former position, although he was not too insistent upon returning immediately since his position was not available at that time. The court held that the employer had not discharged his duty to offer the veteran a job of like seniority, status, and pay, and was therefore liable for damages.

In the second case,[18] however, it appeared that the veteran indicated a strong desire to work at a job other than his former position, even

[15] *Turner* v. *General Motors Corp.* (U. S. D. C. S. D. Ind., Jan. 9, 1947).
[16] *Radzicki* v. *Columbia Aircraft Products, Inc.* (U. S. D. C. D. N. J., Dec. 10, 1946).
[17] *Radzicki* v. *Columbia Aircraft Products, Inc.* (U. S. D. C. D. N. J., Dec. 10, 1946).
[18] *Inglat* v. *Columbia Aircraft Products, Inc.* (U. S. D. C. D. N. J., Dec. 10, 1946).

though the new type of job was not immediately available. On such facts the court ruled that the veteran had not made application to be reinstated, and the employer was not liable for interim damages.

National Labor Relations Act

Free speech and coercive statements.—The extent to which antiunion statements of employers or their representatives are privileged under the free speech amendments and are therefore not violative of the National Labor Relations Act has been further elucidated in several recent cases.

A clear case of unprivileged statements which violated the act was presented when a supervisor expressed antiunion sentiments in violent language, after which he tightened a work schedule which had previously been flexible, and locked a garage which had been open for the personal use of the employees.[19] The court, holding that the statements constituted unlawful interference, emphasized the importance of the particular setting in which they were made—i. e., in a small unit, by a supervisor who had economic power over the employees' jobs. The court said: "We think the violent and profane language * * * when considered in its proper setting, coupled with his course of conduct before and after the employees had joined the union, went beyond the realm of persuasion. It became coercive, or at least was intended to have that effect."

On the other hand the National Labor Relations Board held [20] that an antilabor pamphlet distributed to employees by supervisors working under the employer did not constitute interference, inasmuch as it contained no threats of reprisal if the employees joined the union, and was not accompanied by acts indicative of coercion. The pamphlet in question stated the employer's views as to the undesirability of the union, and concluded with the statement: "How the majority of you vote will decide whether the CIO will represent you or whether you wish to continue to deal directly with our company. Our company will abide by your decision."

The issue of coercive statements was raised in a recent case before the Board [21] in which antiunion statements were made by an employer a short time after two of his employees had been discharged under conditions which appeared to have been discriminatory. The Board, in a split decision, held that the statements were not violative of the act. Member Reynolds felt that the statements were separable from the discharge of the two employees, and since the efforts to unionize

[19] *National Labor Relations Board* v. *Continental Oct Co.* (U. S. C. C. A. (10), Jan. 13, 1947).
[20] In re *Bausch & Lomb Optical Co.* (72 NLRB No. 21, Jan. 25, 1947).
[21] In re *Fisher Governor Co.* (71 NLRB No. 206, Dec. 31, 1946).

the plant had apparently continued unhampered over a long period prior to the discharge, there was no showing of a pattern of conduct indicative of coercion. According to this opinion, he voted in favor of permitting the employer's statements to stand. Chairman Herzog concurred in the vote for this result, but for a different reason. He stated that the evidence indicated the two employees had been discharged for cause rather than for union activity, and since the speech by itself would be protected by the free speech amendments, there was no basis for a holding that the employer had interfered with the union.

Member Houston dissented, contending that the two employees had been discharged for union activity, and that these discharges provided a background for the employer's antiunion speech, which gave it a definite air of coerciveness, and thereby removed it from the protection of the free speech amendment.

Position of ordinary supervisors in grievance procedure.—In the absence of an agreement, a union cannot treat an ordinary supervisory employee as a representative of management for the purpose of presenting an employee grievance, and such supervisor's refusal to consider the grievance upon the request of the union steward does not constitute a refusal to bargain by the employer. This was the decision, in a recent case,[22] of a circuit court of appeals in Chicago. Reversing the Board's decision, the court found that the supervisor in question was known by the union not to be the proper person before whom to present grievances. The court stated: "The union had no more right in the absence of an agreement to rely upon a supervisory employee * * * as the representative of management in the presentation of grievances than respondent had to recognize and deal with some member of the union other than the duly designated grievance committee."

Effect of collective agreement on individual bargaining.—In *J. I. Case* v. *National Labor Relations Board*[23] the United States Supreme Court, while holding that where a collective-bargaining agreement exists all individual bargaining is subordinate to collective bargaining, indicated the possibility of a permissible area of individual bargaining. In a recent decision,[24] the Board interpreted this permissible area of individual bargaining as being confined to aspects of the employment relationship which are not covered by the collective agreement. In this case, the employer, charged with refusing to bargain, had insisted, as a condition precedent to his bargaining, that the union consent to the principle that the collective agreement does not

[22] *National Labor Relations Board* v. *Ross Gear & Tool Co.* (U. S. C. C. A. (7), Jan 2, 1947).
[23] 1944 (321 U. S. 332).
[24] *In re J. I. Case Co.* (71 NLRB —, Dec. —, 1946.

preclude individual bargaining. He relied not only on the above-noted decision of the Supreme Court, but also on an agreement signed by the union 9 years before, in which the principle of individual bargaining had been accepted.

The Board rejected these contentions. With respect to the *Case* decision of the Supreme Court, the Board said: "The Supreme Court recognized the possibility of a permissible area of individual bargaining, but clearly held that the right of individual bargaining was subordinate to the collective agreement and to the collective-bargaining rights of the statutory representative and could not be exercised in derogation thereof. In other words, an employer and his employees may bargain individually with respect to those aspects of the employment relationship which are not covered by the collective-bargaining agreements, provided it is not inconsistent with the collective agreement, or does not amount to, or result from, or is not a part of an unfair labor practice."

As to the effect of the union agreement which purported to accept individual bargaining, the Board ruled that it is contrary to public policy and the spirit of the National Labor Relations Act for a union to bargain away indefinitely its statutory rights to exclusive representation. It held that the employer's utilization of this agreement to preclude collective bargaining with respect to matters covered in the agreement constitutes a refusal to bargain collectively.

Decisions of State Courts

Massachusetts Labor Relations Act not applicable to charity hospitals.—The highest Massachusetts court recently ruled [25] that the Massachusetts Labor Relations Act does not apply to nonprofit charity hospitals and their nonprofessional employees. Rejecting a finding of the labor relations commission that such hospitals are "employers" within the meaning of the act, the court held as controlling, a provision in the act which requires that the employment must be "related to industry and trade." As such, a charity hospital was held not to be engaged in industry or trade.

New Jersey: Peaceful "stranger" picketing permitted.—The New Jersey Chancery Court refused to enjoin the picketing of an employer, who had no controversy with his employees, by a union seeking to secure employment of its members.[26] The court pointed out that, prior to the United States Supreme Court's decision in *Thornhill* v. *Alabama*,[27] the New Jersey courts had consistently refused to permit

[25] *St. Luke's Hospital* v. *Labor Relations Commission* (Mass. Sup. Jud. Ct., Nov. 30, 1946).
[26] *Ukranian National Home* v. *Local 1488, A. F. of L. Bartenders* (N. J. Chan. Ct., Dec. 24, 1946).
[27] 1940 (310 U. S. 88).

the picketing of a place of business in the absence of a controversy between the employer and his employees, but that the court, since that decision, has been required to recognize peaceful picketing as an exercise of freedom of speech.

New Jersey: Antinoise ordinance constitutional.—An antinoise ordinance, the effect of which is to prevent the use of sound trucks in labor picketing or for any other purposes, has been upheld as constitutional by a New Jersey court.[28] Freedom of speech does not include the right to compel others to listen, the court argued, stating that the means of expression through a "booming" sound amplifier is tantamount to coercion.

New York: Anti-injunction Act: Effect of existing collective-bargaining agreement.—A lower New York court recently held[29] that when a union seeks wage increases and shorter hours, the demands give rise to a "labor dispute" within the meaning of the State anti-injunction act, even though the employer and the union involved in the controversy are parties to a contract which has not yet expired. Upon a showing of such facts, the court refused to issue an injunction unless the employer was able to comply with the requirement under the anti-injunction law that he show proof of an effort to settle the dispute by negotiation.

[28] *Kovacs* v. *Cooper* (N. J. Sup. Ct., Dec. 30, 1946).
[29] *Vim Electric Co.* v. *Solomon* (N. Y. Sup. Ct., Jan. 10, 1947, 117 N. Y. L. J. 136).

Labor-Management Disputes

Controversies and Significant Developments, February 1947

MAJOR ATTENTION in the field of labor-management relations during February 1947 was focused on discussions of proposed labor legislation before Congressional committees. The presidents of both the American Federation of Labor and the Congress of Industrial Organizations appeared before the Senate Committee on Labor and Public Welfare and expressed the conviction that the bills under consideration would hinder, rather than help, orderly collective bargaining and peaceful industrial relations. Spokesmen for industry generally declared themselves in favor of legislative proposals designed to prohibit work stoppages over jurisdictional or union rivalry issues and over so-called secondary boycotts. They also urged changes in the National Labor Relations Act designed to "equalize" the bargaining power of employers with that allegedly held by labor organizations under the law. With respect to other legislative proposals, such as the prohibition of a closed or union shop and industry-wide bargaining, there was less unanimity among employer witnesses as to the desirability or effectiveness of such measures.

During the month a number of CIO unions followed the lead of the United Steelworkers in extending the expiration dates of their agreements, or of proceeding slowly in the negotiation of revised contract terms. This was especially the case where wage issues were involved. Discussions between the United Rubber Workers (CIO) and the "Big Four" rubber companies were suspended early in February, following a request of the management representatives for a 90-day postponement of negotiations. Later in the month the union announced that it would take a strike poll of its members employed by the four companies—Goodyear, Goodrich, Firestone, and U. S. Rubber. On the West Coast, a strike of approximately 20,000 employees of 7 large oil refinery companies was averted by a last-minute agreement with the Oil Workers International Union (CIO). At the end of February, 80,000 New York City dressmakers, members of the International Ladies' Garment Workers' Union (AFL) were preparing to cease work early in March unless the 3 associations of dress manufacturers and jobbers improved their offer of a 5-percent pay increase.

Panther Valley (Pa.) Anthracite Stoppage

Disagreement over pay deductions, which had resulted in an earlier stoppage, came to a head February 12, when 13 employees of the Lehigh Navigation Coal Co. and members of the United Mine Workers (AFL) remained underground for 60 hours. This action, although unauthorized by the union, was supported by approximately 5,000 fellow employees and miners in Pennsylvania's Panther Valley anthracite district who quit work to await the outcome of the controversy.

The strike or "sit-down" of the 13 miners reportedly resulted from their dispute with the company over "consideration pay." Under their union agreement, miners paid on a piecework basis are guaranteed a daily minimum whenever conditions prevent them from making their normal earnings. A rule requires the men, however, to remain on the job 7 hours in order to collect this "consideration pay," unless released by the company. The 13 strikers, docked for early quitting, insisted they could not remain in the mine the full 7 hours because of smoke, dust, and other conditions. They emerged from their underground quarters only after assurances that the company would reimburse them for the amounts docked from their pay checks.

The issue raised by the 13 miners, however, focused attention on accumulated grievances against the company. As a result the mines remained closed. Union spokesmen indicated that until disposition of their complaints over working conditions was made, no coal would be dug. At the end of the month the stoppage was still in effect.

Buffalo (N. Y.) Teachers' Strike

About 70,000 school children were the recipients of an unanticipated holiday when approximately 2,400 of the nearly 3,000 teachers in the 98 public schools of Buffalo (N. Y.) forsook their classrooms for picket-line duty on February 24, 1947. The teachers, members of the Buffalo Teachers Federation (an unaffiliated labor organization), suspended work in an effort to secure salary adjustments to offset rising living costs. The stoppage was reportedly supported by members of several smaller Buffalo groups of teachers, including AFL and CIO affiliates. It also high-lighted the unrest currently manifest by public school teachers in other parts of the country.

Efforts of school and municipal authorities to adjust the controversy were not immediately successful; but, on March 2, the Mayor of Buffalo pledged a maximum increase of $625 per year for all municipal employees in the city's new budget. The teachers had been seeking a $500 cost-of-living bonus plus an increase in basic salaries

of $1,025 a year effective in September. Present salary scales for teachers range from $1,875 to $2,975. The stoppage was terminated March 3. The teachers agreed to return to their classrooms upon assurance that salaries for the school year 1947–48 would be increased by $300 to $625. Union officials stated that about 80 percent of the city's teachers would receive the $625 increase.

Work Stoppages in January 1947

IDLENESS ARISING from labor-management controversies in January 1947 reached a postwar low and was less than for any other month since March 1945, according to preliminary estimates of the Bureau of Labor Statistics.

Time lost because of work stoppages totaled approximately 1,250,000 man-days in January 1947 as against 3,065,000 in December 1946. For every 16 man-days of idleness lost in January a year ago, when the large strikes involving the steel, meat-packing, electrical-manufacturing, and auto industries were in effect, only 1 man-day was lost in January 1947.

Stoppages beginning in January 1947 totaled 290 as against 180 in December 1946. Practically all the January stoppages were small and local in character. The total number of workers involved (100,000) was only slightly greater than in the preceding month (95,000 workers).

Including disputes which continued from earlier months, about 460 stoppages involving approximately 150,000 workers were in effect at some time during January.

TABLE 1.—*Work stoppages in January 1947, with comparable figures for earlier periods* [1]

Month [1]	Work stoppages beginning in the month		Man-days idle (all stoppages)	
	Number	Workers involved	Number	Percent of estimated working time (all industries)
January 1947	290	100,000	1,250,000	0.2
December 1946	180	95,000	3,065,000	.4
November 1946	310	450,000	4,750,000	.7
October 1946	450	290,000	4,500,000	.6
January 1946	325	1,400,000	19,750,000	3.1

[1] Figures are preliminary and subject to change. All known work stoppages, arising out of labor-management disputes, involving six or more workers and continuing as long as a full day or shift are included in reports of the Bureau of Labor Statistics. Figures on "workers involved" and "man-days idle" cover all workers made idle in establishments directly involved in a stoppage. They do not measure the indirect or secondary effects on other establishments or industries whose employees are made idle as a result of material or service shortages.

Activities of the U. S. Conciliation Service, January 1947

DURING JANUARY 1947 the United States Conciliation Service closed 1,266 cases involving 468,661 workers. In the table following the cases closed by the Service are shown by type of situation and by method of handling.

Cases closed by the U. S. Conciliation Service in January 1947, by type of situation and by type of disposition

Type of disposition	Total		Work stoppages		Threatened work stoppages		Controversies		Other situations	
	Cases	Workers	Cases	Workers	Cases	Workers	Cases	Workers	Cases	Workers
All cases	1,266	468,661	179	73,598	473	219,097	384	81,901	230	94,065
Settled by conciliation	841	327,708	130	63,294	402	189,778	309	74,636	0	0
Dispute called off	71	10,057	9	828	36	7,711	26	1,518	0	0
Unable to adjust	9	715	6	623	2	87	1	5	0	0
Referred to NLRB and other agencies	73	18,791	27	5,291	27	10,452	19	3,048	0	0
Referred to arbitration	42	17,325	7	3,562	6	11,069	29	2,694	0	0
Consent elections and union memberships	5	142	0	0	0	0	0	0	5	142
Decisions rendered in arbitration	[1] 81	15,922	0	0	0	0	0	0	81	15,922
Technical services completed	25	1,667	0	0	0	0	0	0	25	1,667
Miscellaneous services	119	76,334	0	0	0	0	0	0	119	76,334

[1] This figure includes 3 arbitration cases in which settlements other than arbitration decisions were made.

Prices and Cost of Living

Indexes of Consumers' Prices in Large Cities, January 1947 [1]

THE 10-MONTH ADVANCE of 18.3 percent in the consumers' price index was halted by mid-January 1947. Retail prices of consumers' goods and services declined 0.1 percent between mid-December 1946 and mid-January 1947 as lower prices for foods more than offset further advances in the retail prices of other living essentials. This was the first decline since February 1946.

The consumers' price index on January 15, 1947, was 153.1 (1935–39=100) as compared with 153.3 in mid-December 1946. In mid-January, workers' families paid 17.9 percent more for goods and services than a year ago, and 55.3 percent more than in mid-August 1939. The following tabulation shows the month-to-month percentage change in consumers' prices from February 1946 through January 1947.

	Percent change		*Percent change*
February to March 1946	+0.5	August to September 1946	+1.2
March to April 1946	+.7	September to October 1946	+1.9
April to May 1946	+.5	October to November 1946	+2.4
May to June 1946	+1.2	November to December 1946	+.7
June to July 1946	+5.9	December 1946 to January 1947	−.1
July to August 1946	+2.1		

Retail food prices dropped for the second consecutive month from the mid-November all-time high and were 1.1 percent lower in mid-January than in mid-December. A seasonal drop of 10 percent in the price of eggs and lower prices for dairy products and fats and oils were responsible for this reduction in the family food bill. Prices for all other important groups of foods increased an average of 0.9 percent during the month. Sharp drops in citrus fruit prices were more than offset as prices for all fresh vegetables except green beans advanced.

Clothing prices, which advanced 3.2 percent during the first full month after the removal of price controls in November, rose an additional 1.0 percent between December 15 and January 15. Higher

[1] See footnote 1 on p. 498.

prices were reported for men's topcoats, suits, business shirts, work clothing, and socks, and for women's hosiery, house dresses, and rayon underwear. The family shoe bill was again higher. Prices of men's hats declined, and seasonal reductions were reflected in lower prices for men's and women's coats. Cotton clothing in January 1947 was 127 percent higher than in August 1939; wool clothing costs, 60 percent; and silk, rayon, and nylon apparel, 56 percent. Men's clothing, which advanced 84 percent from August 1939, increased more than women's clothing which was 68 percent higher.

Fuel, electricity, and ice costs rose 1.6 percent on the average as higher prices for anthracite and bituminous coal more than outweighed somewhat lower costs for gas and electricity. The January freight rate increase was reflected in higher retail coal prices in nearly all the

[1] In June 1944 the Secretary of Labor, in releasing the cost-of-living index for May, pointed out some of the difficulties in maintaining such an index during the war. At that time it was explained that "the index is intended to measure only changes in the cost of maintaining essentially the same standard of living and not to measure changes in *total* family expenditures." From that date forward the Bureau of Labor Statistics, with each month's report, explained that "the index does not show the full wartime effect on the cost of living of such factors as lowered quality, disappearance of low-priced goods, forced changes in housing, and eating away from home." This statement was expanded after the report of the President's Committee on the Cost of Living in November 1944, which recommended: "Under the exceptional market conditions which exist in wartime, and so long as we have a seller's market, allowance should be made for a hidden increase in the cost of living of probably as much as 3 and certainly not more than 4 percentage points, due to quality deterioration, disappearance of cheaper goods, decrease of special sales, and increases in underreporting of prices actually charged."

In December 1945, the Stabilization Director, in connection with Executive Orders 9599 and 9651, indicated that if account were taken of continued deterioration of quality and unavailability of merchandise between September 1944 and September 1945, the over-all allowance for the period from January 1941 to September 1945 would total approximately 5 points for large and small cities combined. No agency has attempted to take account of quality changes and other hidden factors affecting the consumers' price index since September 1945.

The President's Committee in establishing the original adjustment explained that the disadvantage to a buyer in a seller's market "can be expected to disappear as soon as we can resume full production of consumer goods and services in a competitive market." It is evident that several of the factors have disappeared or diminished in importance since the end of the war, such as the failure to measure adequately over-ceiling food prices. Other factors still remain, and some have increased, such as special rental charges. The Bureau has never been able to make any precise estimate of the amount of these adjustments. In fact, the President's Committee noted that the methods applied by its Technical Committee "to estimate the hidden increase in living costs in a seller's market * * * should not be adopted by the Bureau of Labor Statistics."

These adjustments have not been included in the consumers' price index, although they have been regularly explained in a footnote. The Bureau is dropping the explanation from its report and is continuing to leave the matter of these adjustments to the users of the index.

TABLES.—The indexes are based on time-to-time changes in the cost of goods and services purchased by moderate-income families in large cities. They do not indicate whether it costs more to live in one city than in another.

Data relate to the fifteenth of each month except those for January 1941, on tables 1 and 2, which have been estimated for January 1.

Wage base date.—January 1, 1941, is the base date for determining allowable "cost of living" wage increases under the Little Steel formula and under the wage-price policy of February 1946. January 1, 1941, indexes in tables 1 and 2 have been estimated by assuming an even rate of change from December 15, 1940, to the next pricing period.

Food prices are collected monthly in 56 cities during the first 4 days of the week which include the Tuesday nearest the fifteenth of the month. Aggregate costs of foods in each city, weighted to represent food purchases of families of wage earners and moderate-income workers, have been combined for the United States with the use of population weights. In March 1943, the number of cities included in the food index was increased from 51 to 56 and the number of foods from 54 to 61.

Prices of clothing, housefurnishings, and miscellaneous goods and services are obtained in 34 large cities in March, June, September, and December. In intervening months, prices are collected in 21 of the 34 cities for a shorter list of goods and services.

cities surveyed. Electricity rates in Manchester and Los Angeles and gas rates in Atlanta decreased fractionally during the month. Gas rates increased in Seattle.

Housefurnishings prices advanced 0.8 percent as prices for most items in this group continued to rise. Costs to consumers of all household appliances except sewing machines increased.

Miscellaneous goods and services costs rose 0.4 percent between mid-December and mid-January. Higher prices for newspapers, motion pictures, tobacco, and household operation caused this rise. Prices for permanent waves were slightly lower in a few cities.

Rents were surveyed in 5 cities in January. No change was reported in New York City and Los Angeles; rents advanced 0.3 percent in Baltimore, and averaged 0.1 and 0.3 percent lower in Kansas City and Savannah. Using the information obtained from these 5 cities surveyed in January, it is estimated that residential rents in large cities have remained generally stable since September 1946 when data were last collected.

TABLE 1.—*Indexes of consumers' prices for moderate-income families and percent changes, Jan. 15, 1947, compared with earlier periods*

Group	Jan. 15, 1947	Dec. 15, 1946	Jan. 15, 1946	Aug. 15, 1945	Jan. 1, 1941	Aug. 15, 1939
	This month	Last month	Year ago	VJ-day	Wage base date	Month before war in Europe
	Indexes (1935–39=100)					
All items	153.1	153.3	[1] 129.9	129.3	100.8	98.6
Food	183.8	185.9	141.0	140.9	97.6	93.5
Clothing	178.3	176.5	149.7	146.4	101.2	100.3
Rent	108.8				105.0	104.3
Fuel, electricity, and ice	117.3	115.5	110.8	111.4	100.8	97.5
Gas and electricity	91.9	92.0	93.8	95.2	97.5	99.0
Other fuels and ice	142.0	138.3	127.3	127.2	104.0	96.3
Housefurnishings	178.5	177.1	148.8	146.0	100.2	100.6
Miscellaneous	136.6	136.1	125.4	124.5	101.8	100.4
	Percent change to January 1947					
All items		−0.1	17.9	18.4	51.9	55.3
Food		−1.1	30.4	30.4	88.3	96.6
Clothing		1.0	19.1	21.8	76.2	77.8
Rent		[1] 0			3.6	4.3
Fuel, electricity, and ice		1.6	5.9	5.3	16.4	20.3
Gas and electricity		−.1	−2.0	−3.5	−5.7	−7.2
Other fuels and ice		2.7	11.5	11.6	36.5	47.5
Housefurnishings		.8	20.0	22.3	78.1	77.4
Miscellaneous		.4	8.9	9.7	34.2	36.1

[1] Change from September 1946.

TABLE 2.—*Percent changes in consumers' price index from specified dates to Jan. 15, 1947, by cities*

City	Indexes (1935–39=100)	Percent changes to January 1947 from—				
	Jan. 15 1947	Dec. 15, 1946	Jan. 15, 1946	Aug. 15, 1945	Jan. 1, 1941	Aug. 15, 1939
	This month	Last month	Year ago	VJ-day	Wage base date	Month before war in Europe
Average	153.1	−0.1	17.9	18.4	51.9	55.3
Baltimore, Md	156.2	.3	18.2	17.8	55.1	58.3
Birmingham, Ala	158.4	−.1	18.8	18.3	55.9	60.8
Boston, Mass	148.3	.1	18.2	18.0	49.6	52.7
Buffalo, N. Y	152.5	.5	17.5	17.9	49.7	54.8
Chicago, Ill	152.9	−.1	19.4	19.5	51.1	54.9
Cincinnati, Ohio	152.6	−.1	17.7	18.0	53.2	56.8
Cleveland, Ohio	155.8	−.3	17.9	17.9	52.7	55.8
Denver, Colo	151.0	−1.0	18.1	18.2	51.0	53.1
Detroit, Mich	152.8	−.2	15.5	16.5	51.3	55.1
Houston, Tex	153.7	.9	20.8	20.6	50.7	52.6
Kansas City, Mo	147.6	.4	15.4	15.7	50.0	49.7
Los Angeles, Calif	155.0	.3	16.8	18.3	51.2	54.2
Minneapolis, Minn	148.2	−1.0	17.3	18.7	45.6	48.6
New York, N. Y	154.4	−.5	17.5	18.8	52.9	56.0
Philadelphia, Pa	152.2	−.2	18.2	18.5	53.4	55.6
Pittsburgh, Pa	155.4	0	18.3	19.4	53.6	57.9
St. Louis, Mo	151.0	−.1	17.3	18.4	49.5	53.9
San Francisco, Calif	159.1	−.8	18.6	20.1	56.3	60.2
Savannah, Ga	162.2	0	17.9	17.3	60.0	63.3
Seattle, Wash	155.5	−1.1	16.5	17.0	52.3	55.0
Washington, D. C	151.9	−.1	16.0	17.8	52.1	54.1

TABLE 3.—*Percent changes in consumers' price index, by cities and groups of items, from Dec. 15, 1946, to Jan. 15, 1947*

City	All items	Food	Clothing	Rent	Fuel, electricity, and ice			House-furnishings	Miscellaneous
					Total	Gas and electricity	Other fuels and ice		
Average	−0.1	−1.1	1.0	[1] 0	1.6	−0.1	2.7	0.8	0.4
Atlanta, Ga	.....	−.6	.....	.....	−.7	−5.8	1.6	.....	.....
Baltimore, Md	.3	−.5	1.8	[2] .3	1.4	0	2.2	.2	.6
Birmingham, Ala	−.1	−1.2	1.0	.....	5.1	0	7.4	1.7	0
Boston, Mass	.1	−.3	.5	.....	1.2	.2	1.7	−.7	.3
Buffalo, N. Y	.5	.1	.4	.....	1.5	0	2.5	.6	1.4
Chicago, Ill	−.1	−1.3	1.7	.....	2.4	0	4.0	.1	1.1
Cincinnati, Ohio	−.1	−.9	.3	.....	1.6	0	2.7	1.0	.4
Cleveland, Ohio	−.3	−1.2	1.4	.....	1.7	0	2.8	−1.9	.3
Denver, Colo	−1.0	−2.9	1.3	.....	.1	0	.2	1.5	.6
Detroit, Mich	−.2	−1.5	1.2	.....	3.3	.4	4.6	.5	.2
Houston, Tex	.9	1.4	1.7	.....	.1	.1	0	1.3	.4
Indianapolis, Ind	.....	−2.3	.....	.....	2.8	0	4.0	.....	.....
Jacksonville, Fla	.....	−2.3	.....	.....	.2	0	.3	.....	.....
Kansas City, Mo	.4	0	.9	[1] −.1	2.5	0	4.1	1.0	.3
Los Angeles, Calif	.3	−.4	1.8	[3] 0	2.2	−1.9	19.4	1.4	.3
Manchester, N. H	.....	−1.7	.....	.....	0	−2.8	1.0	.....	.....
Memphis, Tenn	.....	−2.8	.....	.....	1.5	0	2.0	.....	.....
Milwaukee, Wis	.....	−.9	.....	.....	.1	.2	.1	.....	.....

See footnotes at end of table.

TABLE 3.—*Percent changes in consumers' price index, by cities and groups of items, from Dec. 15, 1946, to Jan. 15, 1947—Continued*

City	All items	Food	Clothing	Rent	Fuel, electricity and ice			House-furnishings	Miscellaneous
					Total	Gas and electricity	Other fuels and ice		
Minneapolis, Minn.	−1.0	−3.4	1.2	.....	0.9	0	1.3	1.9	0
Mobile, Ala.	.....	−.9	.....	.....	.2	.1	.2	.....	.....
New Orleans, La.	.....	−1.3	.....	.....	0	0	0	.....	.....
New York, N. Y.	−.5	−1.4	.1	[1] 0	.4	0	.9	1.0	.3
Norfolk, Va.	.....	−1.9	.....	.....	2.3	0	3.5	.....	.....
Philadelphia, Pa.	−.2	−1.2	1.5	.....	1.3	0	2.1	.6	−.2
Pittsburgh, Pa.	0	−1.3	1.7	.....	2.2	0	5.1	3.8	.2
Portland, Maine	.....	−.4	.....	.....	1.3	−.3	1.7	.....	.....
Portland, Oreg.	.....	−1.6	.....	.....	1.0	−.1	1.6	.....	.....
Richmond, Va.	.....	−2.7	.....	.....	2.2	0	3.3	.....	.....
St. Louis, Mo.	−.1	−1.0	.9	.....	2.4	0	4.2	.5	.1
San Francisco, Calif.	−.8	−2.0	.4	.....	0	0	0	.8	.1
Savannah, Ga.	0	−1.0	.4	[2] −.3	1.2	0	1.7	2.0	1.2
Scranton, Pa.	.....	−2.3	.....	.....	0	0	0	.....	.....
Seattle, Wash.	−1.1	−3.2	1.7	.....	1.8	2.6	1.4	.2	.2
Washington, D. C.	−.1	−1.3	1.5	.....	1.7	0	2.6	1.1	.2

[1] Change from September 1946.
[2] Change from August 1946.

TABLE 4.—*Indexes of consumers' prices for moderate-income families in large cities, 1935 to January 1947*

Year and month	Indexes (1935–39=100) of cost of—						
	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House-furnishings	Miscellaneous
1935	98.1	100.4	96.8	94.2	100.7	94.8	98.1
1936	99.1	101.3	97.6	96.4	100.2	96.3	98.7
1937	102.7	105.3	102.8	100.9	100.2	104.3	101.0
1938	100.8	97.8	102.2	104.1	99.9	103.3	101.5
1939	99.4	95.2	100.5	104.3	99.0	101.3	100.7
1940	100.2	96.6	101.7	104.6	99.7	100.5	101.1
1941	105.2	105.5	106.3	106.2	102.2	107.3	104.0
1942	116.5	123.9	124.2	108.5	105.4	122.2	110.9
1943	123.6	138.0	129.7	108.0	107.7	125.6	115.8
1944	125.5	136.1	138.8	108.2	109.8	136.4	121.3
1945	128.4	139.1	145.9	108.3	110.3	145.8	124.1
1945:							
Jan. 15	127.1	137.3	143.0	[1]	109.7	143.6	123.3
Feb. 15	126.9	136.5	143.3	[1]	110.0	144.0	123.4
Mar. 15	126.8	135.9	143.7	108.3	110.0	144.5	123.6
Apr. 15	127.1	136.6	144.1	[1]	109.8	144.9	123.8
May 15	128.1	138.8	144.6	[1]	110.0	145.4	123.9
June 15	129.0	141.1	145.4	108.3	110.0	145.8	124.0
July 15	129.4	141.7	145.9	[1]	111.2	145.6	124.3
Aug. 15	129.3	140.9	146.4	[1]	111.4	146.0	124.5
Sept. 15	128.9	139.4	148.2	108.3	110.7	146.8	124.6
Oct. 15	128.9	139.3	148.5	[1]	110.5	146.9	124.7
Nov. 15	129.3	140.1	148.7	[1]	110.1	147.6	124.6
Dec. 15	129.9	141.4	149.4	108.3	110.3	148.3	124.8
1946:							
Jan. 15	129.9	141.0	149.7	[1]	110.8	148.8	125.4
Feb. 15	129.6	139.6	150.5	[1]	111.0	149.7	125.6
Mar. 15	130.2	140.1	153.1	108.4	110.5	150.2	125.9
Apr. 15	131.1	141.7	154.5	[1]	110.4	152.0	126.7
May 15	131.7	142.6	155.7	[1]	110.3	153.7	127.2
June 15	133.3	145.6	157.2	108.5	110.5	156.1	127.9
July 15	141.2	165.7	158.7	[1]	113.3	157.9	128.2
Aug. 15	144.1	171.2	161.2	108.7	113.7	160.0	129.8
Sept. 15	145.9	174.1	165.9	108.8	114.4	165.6	129.9
Oct. 15	148.6	180.0	168.1	[1]	114.4	168.5	131.0
Nov. 15	152.2	187.7	171.0	[1]	114.8	171.0	132.5
Dec. 15	153.3	185.9	176.5	[1]	115.5	177.1	136.1
1947: Jan. 15	153.1	183.8	178.3	108.8	117.3	178.5	136.6

[1] Rents not surveyed in this month.

Retail Prices of Food in January 1947

RETAIL prices of food in January 1947 in relation to those in selected preceding periods are shown in the accompanying tables.

TABLE 1.—*Percent of change in retail prices of food in 56 large cities combined, by commodity groups, in specified periods*

[1935-39=100]

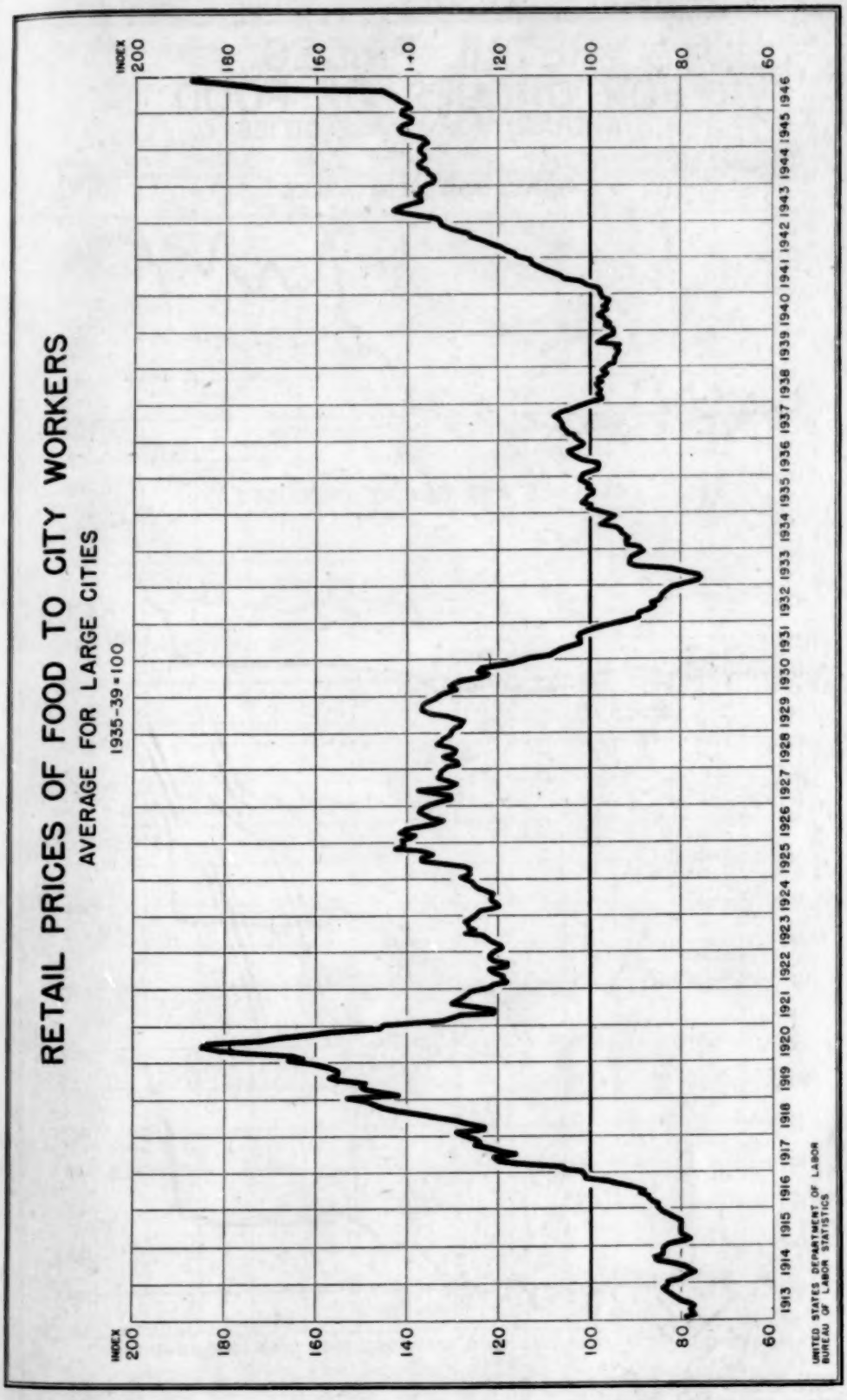
Commodity group	Dec. 15, 1946, to Jan. 15, 1947	Jan. 15, 1946, to Jan. 15, 1947	Aug. 15, 1945, to Jan. 15, 1947	Jan. 15, 1941, to Jan. 15, 1947	Aug. 15, 1939, to Jan. 15, 1947
All foods	−1.1	+36.4	+30.4	+87.9	+96.6
Cereals and bakery products	+1.2	+31.1	+31.4	+51.1	+53.5
Meats	+.6	+51.4	+51.0	+96.8	+107.9
Beef and veal	+1.8	+61.5	+61.1	+74.5	+91.7
Pork	−1.3	+69.4	+69.4	+121.5	+116.7
Lamb	+3.3	+50.5	+50.5	+108.0	+107.8
Chickens	−1.9	+21.7	+18.1	+91.2	+96.4
Fish, fresh and canned	+1.4	+19.4	+24.6	+128.6	+172.4
Dairy products	−5.4	+39.4	+42.5	+80.9	+104.2
Eggs	−9.6	+5.4	+6.0	+86.6	+100.3
Fruits and vegetables	+1.6	+3.9	+2.4	+101.4	+103.4
Fresh	+1.9	−4.5	−6.2	+97.1	+98.4
Canned	+.6	+33.0	+33.2	+89.9	+89.5
Dried	+.4	+59.3	+59.7	+170.3	+198.1
Beverages	+1.2	+42.8	+43.0	+96.1	+87.9
Fats and oils	−2.6	+60.9	+62.8	+151.4	+138.9
Sugar and sweets	+.5	+39.3	+39.2	+84.9	+84.3

TABLE 2.—*Indexes of retail prices of food in 56 large cities combined,*[1] *by commodity groups, on specified dates*

[1935-39=100]

Commodity group	Jan. 15, 1947	Dec. 15, 1946	Jan. 15, 1946	Aug. 15, 1945	Jan. 15, 1941	Aug. 15, 1939
	This month	Last month	Year ago	VJ-day	Wage base date[2]	Month before war in Europe
All foods	183.8	185.9	141.0	140.9	97.8	93.5
Cereals and bakery products	143.4	[3] 141.7	109.4	109.1	94.9	93.4
Meats	199.0	197.8	131.4	131.8	101.1	95.7
Beef and veal	190.9	187.6	118.2	118.5	109.4	99.6
Pork	190.8	193.3	112.6	112.6	86.1	88.0
Lamb	205.3	198.8	136.4	136.4	98.7	98.8
Chickens	185.8	189.4	152.7	157.3	97.2	94.6
Fish, fresh and canned	271.3	267.6	227.3	217.8	118.7	99.6
Dairy products	190.1	200.9	136.4	133.4	105.1	93.1
Eggs	181.7	201.1	172.4	171.4	97.4	90.7
Fruits and vegetables	187.9	185.0	180.8	183.5	93.3	92.4
Fresh	184.1	180.6	192.7	196.2	93.4	92.8
Canned	173.6	172.6	130.5	130.3	91.4	91.6
Dried	269.2	268.0	169.0	168.6	99.6	90.3
Beverages	178.3	176.2	124.9	124.7	90.9	94.9
Fats and oils	201.9	207.3	125.5	124.0	80.3	84.5
Sugar and sweets	176.2	175.3	126.5	126.6	95.3	95.6

[1] Aggregate costs of 61 foods in each city, weighted to represent total purchases by families of wage earners and lower-salaried workers, have been combined for the United States with the use of population weights.
[2] The wage formulas apply to Jan. 1, 1941. Jan. 15, 1941, is the nearest date for which data on retail prices of individual foods have been computed.
[3] Revised.


RETAIL PRICES OF FOOD TO CITY WORKERS
AVERAGE FOR LARGE CITIES
1935-39=100
INDEX
200
180
160
140
120
100
80
60
1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

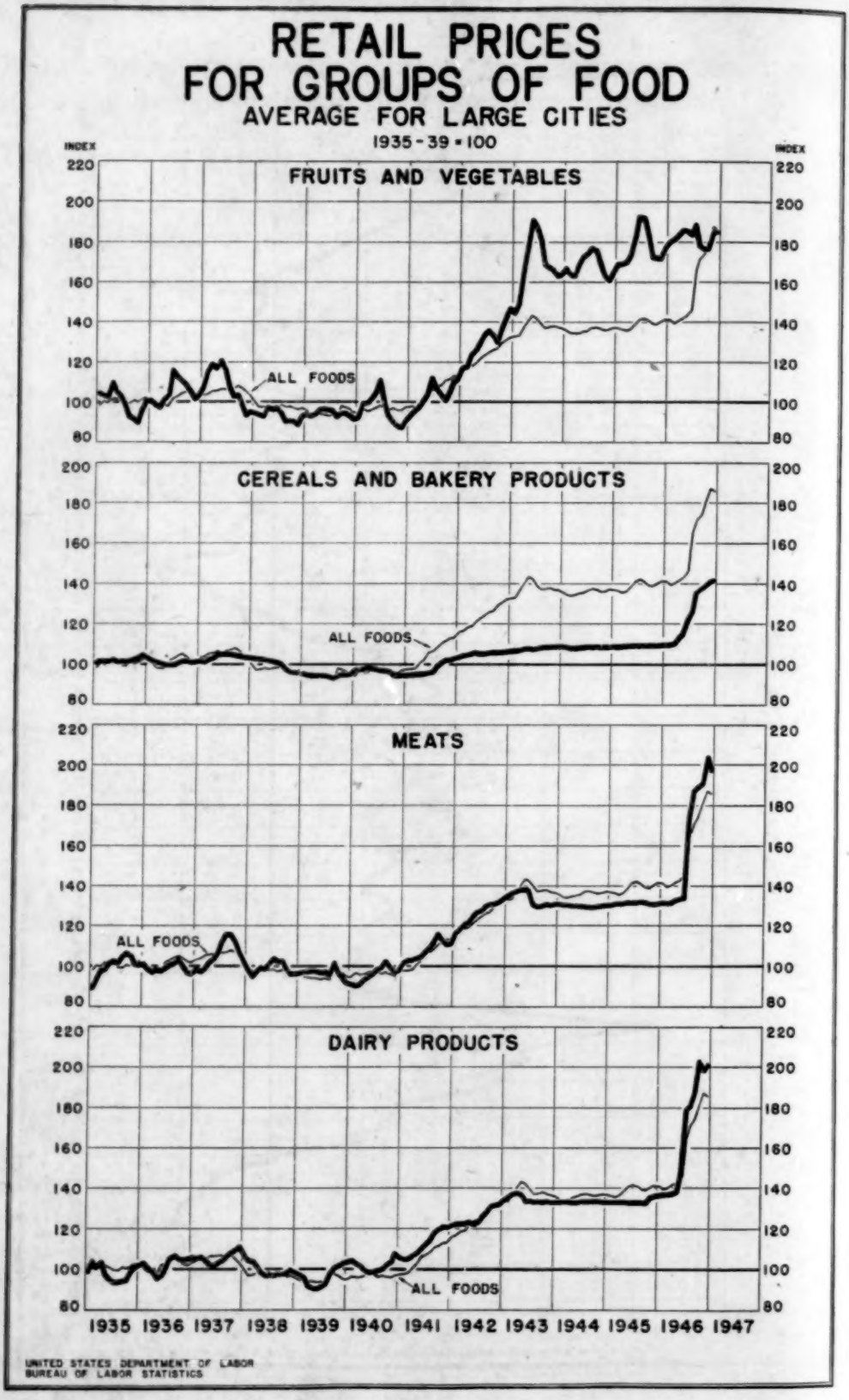

RETAIL PRICES
FOR GROUPS OF FOOD
AVERAGE FOR LARGE CITIES
1935-39 = 100
INDEX
FRUITS AND VEGETABLES
ALL FOODS
CEREALS AND BAKERY PRODUCTS
ALL FOODS
MEATS
ALL FOODS
DAIRY PRODUCTS
ALL FOODS
220
200
180
160
140
120
100
80
1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

TABLE 3.—*Average retail prices of 70 foods in 56 large cities combined, January 1947, compared with earlier months*

Article	Jan. 15, 1947	Dec. 15, 1946	Jan. 15, 1946	Aug. 15, 1945	Jan. 15, 1941	Aug. 15, 1939
	This month	Last month	Year ago	VJ-day	Wage base date [1]	Month before war in Europe
Cereals and bakery products:						
Cereals:	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Flour, wheat, 5 pounds	41.7	41.1	31.9	32.2	20.7	17.9
Macaroni, pound	19.1	19.0	15.6	15.8	13.8	14.0
Corn flakes, 11 ounces	12.1	12.0	9.3	9.2	9.8	9.7
Corn meal, pound	9.1	9.0	6.5	6.4	4.2	4.0
Rice [2], do	16.9	16.3	12.9	13.0	7.9	7.5
Rolled oats, 20 ounces	13.4	13.4	13.1	13.0	8.9	8.9
Bakery products:						
Bread, white, pound	11.6	11.5	8.8	8.8	7.8	7.8
Bread, whole-wheat, do	12.6	12.6	9.7	9.7	8.7	8.8
Bread, rye, do	13.4	13.4	9.9	9.9	9.0	9.2
Vanilla cookies, do	38.8	[3]	28.4	28.6	25.1	[3]
Soda crackers, do	24.6	24.5	18.6	18.9	15.0	14.8
Meats:						
Beef:						
Round steak, do	66.0	64.3	40.6	40.9	38.6	36.4
Rib roast, do	55.9	55.2	33.4	33.0	31.5	28.9
Chuck roast, do	46.6	46.3	28.4	28.4	25.2	22.5
Liver, do	53.2	52.7	37.4	36.9	[3]	[3]
Hamburger, do	41.1	41.4	27.3	27.4	[3]	[3]
Veal:						
Cutlets, do	72.7	69.7	44.6	44.4	45.2	42.5
Roast, boned and rolled [2], do	54.2	52.3	36.0	34.3	[3]	[3]
Pork:						
Chops, do	60.0	57.7	37.1	37.2	29.1	30.9
Bacon, sliced, do	71.5	75.2	40.9	41.2	30.1	30.4
Ham, sliced, do	83.1	83.7	50.5	49.4	45.1	46.4
Ham, whole, do	63.2	65.3	35.7	34.5	26.2	27.4
Salt pork, do	42.4	50.3	22.0	22.0	16.7	15.4
Sausage [2], do	52.4	55.0	38.8	38.7	[3]	[3]
Lamb:						
Leg, do	61.6	59.4	40.3	40.5	27.8	27.6
Rib chops, do	67.4	65.6	45.7	46.0	35.0	36.7
Poultry: Roasting chickens, do	56.1	57.2	46.3	47.6	31.1	30.9
Fish:						
Fish (fresh, frozen), do	[4]	[4]	[4]	[4]	[4]	[4]
Salmon, pink, 16-ounce can	35.1	[5]	24.7	23.4	15.7	12.8
Salmon, red [2], do	59.0	[5]	43.2	39.7	26.4	23.1
Dairy products:						
Butter, pound	79.5	91.5	54.7	49.9	38.0	30.7
Cheese, do	63.5	65.8	36.5	35.7	27.0	24.7
Milk, fresh (delivered), quart	20.1	20.3	15.4	15.6	13.0	12.0
Milk, fresh (store), do	19.3	19.4	14.5	14.5	11.9	11.0
Milk, evaporated, 14½-ounce can	14.0	14.0	9.9	10.1	7.1	6.7
Eggs: Eggs, fresh, dozen	63.0	69.8	59.9	60.6	34.9	32.0
Fruits and vegetables:						
Fresh fruits:						
Apples, pound	12.5	12.4	14.4	13.1	5.2	4.4
Bananas, do	14.7	14.5	11.0	10.5	6.6	6.1
Oranges, dozen	37.8	42.6	46.0	51.3	27.3	31.5
Grapefruit [2], each	7.9	8.1	8.6	11.0	[3]	[3]
Fresh vegetables:						
Beans, green, pound	18.7	20.0	25.0	18.7	14.0	7.2
Cabbage, do	6.3	5.4	5.7	6.0	3.4	3.9
Carrots, bunch	10.6	9.6	9.0	9.1	6.0	4.6
Lettuce, head	13.6	12.6	10.6	12.5	8.4	8.4
Onions, pound	4.9	4.8	8.1	7.9	3.6	3.6
Potatoes, 15 pounds	63.8	61.4	70.0	73.8	29.2	34.4
Spinach, pound	14.0	11.6	12.6	11.6	7.3	7.8
Sweetpotatoes, do	10.4	10.0	10.1	11.4	5.0	5.5
Canned fruits:						
Peaches, No. 2½ can	32.2	32.1	28.1	27.2	16.5	17.1
Pineapple, do	32.2	[5]	28.0	26.3	20.9	21.0
Grapefruit juice, No. 2 can	11.8	13.2	14.1	14.4	[3]	[3]
Canned vegetables:						
Beans, green, do	15.8	15.8	13.6	13.2	10.0	10.0
Corn, do	18.1	17.9	14.7	14.8	10.7	10.4
Peas, do	15.8	15.8	13.8	13.2	13.2	13.6
Tomatoes, do	21.3	21.1	12.9	12.2	8.4	8.6
Soup, vegetable [2], 11-ounce can	14.3	14.3	13.3	13.2	[3]	[3]
Dried fruits: Prunes, pound	25.7	25.6	17.7	17.4	9.6	8.8
Dried vegetables: Navy beans, do	21.2	21.1	11.7	11.5	6.5	5.8

See footnotes at end of table.

TABLE 3.—*Average retail prices of 70 foods in 56 large cities combined, January 1947, compared with earlier months*—Continued

Article		Jan. 15, 1947	Dec. 15, 1946	Jan. 15, 1946	Aug. 15, 1945	Jan. 15, 1941	Aug. 15, 1939
		This month	Last month	Year ago	VJ-day	Wage base date [1]	Month before war in Europe
Beverages:		*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Coffee	pound	44.7	44.1	30.4	30.5	20.7	22.3
Tea	¼ pound	24.1	24.1	24.0	24.2	17.6	17.2
Cocoa [2]	½ pound	12.9	12.5	10.5	10.4	9.1	8.6
Fats and oils:							
Lard	pound	32.5	35.1	18.7	18.8	9.3	9.9
Shortening other than lard:							
In cartons	do	36.9	([3])	20.2	20.0	11.3	11.7
In other containers	do	44.3	44.3	24.8	24.5	18.3	20.2
Salad dressing	pint	39.5	39.3	28.1	24.2	20.1	([3])
Oleomargarine	pound	42.3	42.5	[4] 24.1	23.9	15.6	16.5
Peanut butter	do	35.5	35.4	32.2	28.6	17.9	17.9
Oil, cooking or salad [2]	pint	48.7	48.3	30.8	30.5	([3])	([3])
Sugar and sweets:							
Sugar	pound	9.5	9.4	6.7	6.7	5.1	5.2
Corn sirup	24 ounces	18.8	19.4	15.7	15.8	13.6	13.7
Molasses [2]	16 fluid ounces	20.9	21.0	20.3	20.4	17.3	17.6

[1] The wage formulas apply to Jan. 1, 1941. Jan. 15, 1941, is the nearest date for which data on retail prices of individual foods have been computed.
[2] Not included in index.
[3] Not priced.
[4] Composite price not computed.
[5] Not available.
[6] Revised.

TABLE 4.—*Indexes of average retail prices of all foods, by cities,[1] on specified dates*

[1935–39=100]

City	Jan. 15, 1947	Dec. 15, 1946	Jan. 15, 1946	Aug. 15, 1945	Jan. 15, 1941	Aug. 15, 1939
	This month	Last month	Year ago	VJ-day	Wage base date [2]	Month before war in Europe
United States	183.8	185.9	141.0	140.9	97.8	93.5
Atlanta, Ga	187.5	188.7	141.5	142.1	94.3	92.5
Baltimore, Md	191.4	192.3	147.7	149.1	97.9	94.7
Birmingham, Ala	196.0	198.4	144.6	147.5	96.0	90.7
Boston, Mass	177.6	178.1	135.1	135.7	95.2	93.5
Bridgeport, Conn	180.0	180.7	135.1	137.4	96.5	93.2
Buffalo, N. Y	175.9	175.8	136.9	138.4	100.2	94.5
Butte, Mont	174.9	180.2	136.2	138.7	98.7	94.1
Cedar Rapids, Iowa [3]	188.6	192.7	143.0	145.3	95.9	----
Charleston, S. C	180.5	184.2	138.7	139.7	95.9	95.1
Chicago, Ill	184.5	187.0	139.2	139.2	98.2	92.3
Cincinnati, Ohio	182.4	184.0	138.2	140.0	96.5	90.4
Cleveland, Ohio	189.1	191.4	144.2	145.6	99.2	93.6
Columbus, Ohio	171.6	174.0	132.5	134.0	93.4	88.1
Dallas, Tex	186.3	187.1	138.5	138.9	92.6	91.7
Denver, Colo	185.0	190.6	139.8	139.3	94.8	92.7
Detroit, Mich	176.5	179.2	137.8	138.4	97.0	90.6
Fall River, Mass	180.9	177.2	134.6	134.1	97.5	95.4
Houston, Tex	192.5	189.9	140.8	141.2	102.6	97.8
Indianapolis, Ind	180.0	184.3	138.0	137.7	98.2	90.7
Jackson, Miss. [3]	199.1	200.8	149.2	151.2	105.3	----
Jacksonville, Fla	190.3	194.8	149.9	152.0	98.8	95.8
Kansas City, Mo	175.4	175.4	134.5	135.4	92.4	91.5
Knoxville, Tenn. [3]	216.4	220.4	160.5	160.6	97.1	----
Little Rock, Ark	182.4	184.8	140.8	140.4	95.6	94.0
Los Angeles, Calif	194.3	195.1	148.6	145.9	101.8	94.6

See footnotes at end of table.

TABLE 4.—*Indexes of average retail prices of all foods, by cities,*[1] *on specified dates*—Continued

[1935-39=100]

City	Jan. 15, 1947	Dec. 15, 1946	Jan. 15, 1946	Aug. 15, 1945	Jan. 15, 1941	Aug. 15, 1939
	This month	Last month	Year ago	VJ-day	Wage base date[2]	Month before war in Europe
Louisville, Ky	177.7	178.6	134.2	135.0	95.5	92.1
Manchester, N. H	183.6	186.7	136.7	136.4	96.6	94.9
Memphis, Tenn	200.2	206.0	151.2	150.9	94.2	89.7
Milwaukee, Wis	178.0	179.7	137.5	139.4	95.9	91.1
Minneapolis, Minn	174.0	180.2	134.3	133.2	99.0	95.0
Mobile, Ala	189.2	191.0	147.9	152.3	97.9	95.5
Newark, N. J	178.5	180.4	144.4	143.4	98.8	95.6
New Haven, Conn	177.3	179.1	135.9	137.2	95.7	93.7
New Orleans, La	199.7	202.4	152.7	156.5	101.9	97.6
New York, N. Y	183.5	186.1	143.5	141.7	99.5	95.8
Norfolk, Va	191.3	195.0	146.5	146.1	95.8	93.6
Omaha, Nebr	178.2	182.9	133.6	131.8	97.9	92.3
Peoria, Ill	187.1	186.2	146.5	145.9	99.0	93.4
Philadelphia, Pa	179.7	181.8	138.9	138.9	95.0	93.0
Pittsburgh, Pa	185.2	187.7	141.0	141.3	98.0	92.5
Portland, Maine	179.8	180.5	134.2	135.7	95.3	95.9
Portland, Oreg	192.8	196.0	149.1	150.9	101.7	96.1
Providence, R. I	183.8	184.0	140.4	141.6	96.3	93.7
Richmond, Va	181.5	186.5	138.7	138.3	93.7	92.2
Rochester, N. Y	177.4	176.8	136.6	137.8	99.9	92.3
St. Louis, Mo	187.4	189.3	144.3	144.0	99.2	93.8
St. Paul, Minn	173.1	177.7	132.9	132.1	98.6	94.3
Salt Lake City, Utah	183.9	190.6	142.2	143.9	97.5	94.6
San Francisco, Calif	200.6	204.6	149.5	147.1	99.6	93.8
Savannah, Ga	203.8	205.8	153.8	157.5	100.5	96.7
Scranton, Pa	180.9	185.2	140.2	141.3	97.5	92.1
Seattle, Wash	189.6	195.9	146.0	145.8	101.0	94.5
Springfield, Ill	193.4	191.6	145.8	146.1	96.2	94.1
Washington, D. C	183.7	186.1	143.0	141.7	97.7	94.1
Wichita, Kans.[3]	193.3	195.5	150.4	149.8	97.2	----
Winston-Salem, N. C.[3]	192.6	195.3	143.1	143.4	93.7	----

[1] Aggregate costs of 61 foods in each city, weighted to represent total purchases by families of wage earners and lower-salaried workers, have been combined for the United States with the use of population weights.
[2] The wage formulas apply to Jan. 1, 1941. Jan. 15, 1941, is the nearest date for which data on retail prices of individual foods have been computed.
[3] June 1940=100.

TABLE 5.—*Indexes of retail food prices in 56 large cities combined, 1913 to January 1947*

[1935-39=100]

Year	All foods index	Year	All foods index	Year and Month	All foods index	Year and month	All foods index
1913	79.9	1926	137.4	1940	96.6	*1946*—Con.	
1914	81.8	1927	132.3	1941	105.5	June	145.6
1915	80.9	1928	130.8	1942	123.9	July	165.7
1916	90.8	1929	132.5	1943	138.0	August	171.2
1917	116.9	1930	126.0	1944	136.1	September	174.1
1918	134.4	1931	103.9	1945	139.1	October	180.0
1919	149.8	1932	86.5	1946	159.6	November	187.7
		1933	84.1			December	185.9
1920	168.8	1934	93.7	*1946*			
1921	128.3	1935	100.4	January	141.0	*1947*	
1922	119.9	1936	101.3	February	139.6	January	183.8
1923	124.0	1937	105.3	March	140.1		
1924	122.8	1938	97.8	April	141.7		
1925	132.9	1939	95.2	May	142.6		

Wholesale Prices in January 1947

AVERAGE PRIMARY MARKET prices[1] rose 0.4 percent from December 1946 to January 1947 as increases in most industrial commodity groups more than offset declines for farm products, foods and hides, and leather products. At 141.5 percent of the 1926 average, the comprehensive index of commodity prices in primary markets was higher than in any month since October 1920. Although the index was 15.4 percent below the all-time peak of 167.2 in May 1920, it was 32.1 percent higher than in January 1946 and 88.7 percent above August 1939.

The index for all commodities other than farm products and foods advanced 2.3 percent during January 1947, reaching a level 59.3 percent higher than at the beginning of the war. Building material prices rose 7.5 percent, and there were increases of from 1 to 3 percent for metals and metal products, chemicals and allied products, fuel and lighting materials, housefurnishing goods, textile products, and miscellaneous commodities. Hides and leather products dropped 0.9 percent. Average prices of raw materials decreased 0.7 percent, largely because of declines for agricultural commodities. Semimanufactured products rose 1.9 percent and manufactured products 0.7 percent.

The increase for building materials was primarily due to sharp advances for lumber, paint and paint materials, and hardware. Most lumber quotations were higher, the increases ranging in the main from 3 to 15 percent, with even sharper rises for a few items. In general, increases were larger for the better grades. Prices of most prepared paints and paint materials also rose during the month, reflecting higher costs and short supplies of materials. Prices of shellac and turpentine declined. The substantial advances for other building materials (including builders' hardware, brick and tile, cement, structural steel, metal pipe, and other metal products) were largely due to increased costs.

An increase of 5.5 percent for iron and steel and smaller increases in all other subgroups raised the group index for metals and metal products 2.4 percent during the month. Prices of iron ore, pig iron, and scrap steel were higher. Increases for most steel products, ranging up to nearly 24 percent for sheet bars, reflected a general revision of the price structure in the steel industry after elimination of price controls. There were further advances for nonferrous metals and their products, especially zinc sheets. Prices of bar silver de-

[1] The Bureau of Labor Statistics wholesale price data, for the most part, represent prices in primary markets. In general, the prices are those charged by manufacturers or producers or are those prevailing on commodity exchanges. The monthly index is calculated from a monthly average of 1-day-a-week prices. It should not be compared directly with the weekly wholesale price index, which is designed as an indicator of week-to-week changes. Indexes for the last 2 months are preliminary.

clined nearly 12 percent as foreign supplies improved and demand decreased. There were fractional advances for agricultural implements and motor vehicles.

Higher costs of raw materials and increased freight rates, effective January 1, 1947, were primarily responsible for an advance of 1.7 percent for fuel and lighting materials.

The group index for chemicals and allied products rose 1.9 percent, with increases in all subgroups led by fertilizer materials, mixed fertilizers, and oils and fats. Price schedules for 1947 carried higher prices for many industrial chemicals and some drugs and pharmaceuticals.

Prices of miscellaneous commodities advanced 1.3 percent as a group. Crude rubber prices averaged 10.8 percent higher for the month as the Reconstruction Finance Corporation raised its selling price to cover purchase costs. Increased foreign prices were reflected in substantially higher prices in new contracts for domestic wood pulp. Boxboard prices rose sharply because of higher production costs, especially raw materials. Improved supplies of corn resulted in a decline of 6.2 percent in prices of cattle feed.

Textiles, as a group, were 1.4 percent higher. Increased raw materials and labor costs were responsible for higher prices of wool coating and yarns, men's topcoats and suits, overalls, and cotton knit underwear. The rise in prices continued for the small supplies of cotton gray goods available for immediate delivery. Prices of Manila hemp and rope were up sharply, but burlap and raw jute prices dropped. Average prices of raw silk for January 1947 were less than the December 1946 average, reflecting lower prices at the Government's auction in December.

Average prices of housefurnishing goods rose 2.6 percent. Prices of many wood household furniture items increased and there were sizable advances for electrical appliances, mattresses and oilcloth, owing to higher production costs.

Continuing the downward movement of December, there were general declines for farm products, with the group index down 1.8 percent. January quotations for steers, cows, hogs, and lambs were lower than in December. Scarcity caused a sharp advance for calves and there also were increases for ewes and wethers. A fractional decline occurred in wheat prices. Corn declined, with good supplies and a reduction in the Government's purchase price; oats dropped because of increased availability of corn. Barley and rye continued to advance. Ample supplies were responsible for substantial declines in prices of citrus fruits, while poor quality brought lower prices for apples. Prices for domestic wool were higher following increases in

Commodity Credit Corporation selling prices at the end of December to meet parity requirements. Cotton quotations in 10 spot markets were down.

Food prices decreased 2.4 percent during the month. The largest decline occurred in prices of dairy products (8.6 percent). Butter prices dropped 18 percent and cheese 5.5 percent, with strong resistance to previous high prices. A seasonal decline occurred in prices of fluid milk; skimmed and evaporated milk also decreased. Adequate supplies caused declines for beef but higher prices were reported for lamb and mutton, in short supply. Cereal products were fractionally higher. Sugar prices increased under the terms of an agreement with Cuba which bases purchase prices on the Bureau's consumer price indexes. Prices of cocoa beans, powdered cocoa, and coffee were higher, and there were increases for some vegetable oils. A sharp decrease occurred for oleo oil, and black pepper prices also declined.

Further substantial decreases for hides and skins, owing to heavy livestock slaughter, and some declines for leather lowered the group index for hides and leather products 0.9 percent in January. Manufacturers' prices for men's shoes and for gloves continued upward.

TABLE 1.—*Indexes of wholesale prices by groups and subgroups of commodities, January 1947 compared with previous months*

Group and subgroup	Indexes (1926=100)				Percent changes to January 1947 from—		
	Jan. 1947	Dec. 1946	Jan. 1946	Aug. 1939	Dec. 1946	Jan. 1946	Aug. 1939
All commodities	[1] 141.5	[1] 140.9	107.1	75.0	+0.4	+32.1	+88.7
Farm products	165.0	168.1	129.9	61.0	−1.8	+27.0	+170.5
Grains	162.6	163.0	133.8	51.5	−.2	+21.5	+215.7
Livestock and poultry	189.6	194.7	131.5	66.0	−2.6	+44.2	+187.3
Other farm products	149.7	152.5	126.9	60.1	−1.8	+18.0	+149.1
Foods	156.2	160.1	107.3	67.2	−2.4	+45.6	+132.4
Dairy products	164.6	180.0	115.0	67.9	−8.6	+43.1	+142.4
Cereal products	139.9	139.5	95.8	71.9	+.3	+46.0	+94.6
Fruits and vegetables	131.6	134.5	125.7	58.5	−2.2	+4.7	+125.0
Meats	183.4	188.2	108.1	73.7	−2.6	+69.7	+148.8
Other foods	141.1	139.0	96.2	60.3	+1.5	+46.7	+134.0
Hides and leather products	175.1	176.7	119.4	92.7	−.9	+46.6	+88.9
Shoes	170.6	169.9	127.9	100.8	+.4	+33.4	+69.2
Hides and skins	198.5	216.5	117.6	77.2	−8.3	+68.8	+157.1
Leather	181.6	185.0	103.8	84.0	−1.8	+75.0	+116.2
Other leather products	140.3	123.6	115.2	97.1	+13.5	+21.8	+44.5
Textile products	136.6	134.7	101.6	67.8	+1.4	+34.4	+101.5
Clothing	132.4	129.8	107.4	81.5	+2.0	+23.3	+62.5
Cotton goods	184.6	181.6	125.6	65.5	+1.7	+47.0	+181.8
Hosiery and underwear	99.3	96.9	75.2	61.5	+2.5	+32.0	+61.5
Rayon	33.8	33.8	30.2	28.5	0	+11.9	+18.6
Silk	101.2	103.2	.....	44.3	−1.9	.....	+128.4
Woolen and worsted goods	120.8	119.0	112.7	75.5	+1.5	+7.2	+60.0
Other textile products	169.9	168.1	101.9	63.7	+1.1	+66.7	+166.7

See footnotes at end of table.

TABLE 1.—*Indexes of wholesale prices by groups and subgroups of commodities, January 1947 compared with previous months*—Continued

Group and subgroup	Indexes (1926=100)				Percent changes to January 1947 from—		
	Jan. 1947	Dec. 1946	Jan. 1946	Aug. 1939	Dec. 1946	Jan. 1946	Aug. 1939
Fuel and lighting materials	97.7	96.1	84.9	72.6	+1.7	+15.1	+34.6
Anthracite	114.7	113.7	103.9	72.1	+.9	+10.4	+59.1
Bituminous coal	142.6	138.9	125.1	96.0	+2.7	+14.0	+148.5
Coke	152.5	147.5	134.9	104.2	+3.4	+13.0	+46.4
Electricity	(2)	(2)	69.2	75.8			
Gas	(2)	83.1	77.4	86.7			
Petroleum and products	76.5	75.8	61.5	51.7	+.9	+24.4	+48.0
Metals and metal products	[1] 138.0	[1] 134.7	105.7	93.2	+2.4	+30.6	+48.1
Agricultural implements	117.5	117.1	98.1	93.5	+.3	+19.8	+25.7
Farm machinery	119.0	118.6	99.1	94.7	+.3	+20.1	+25.7
Iron and steel	123.9	117.4	101.2	95.1	+5.5	+22.4	+30.3
Motor vehicles	[1] 151.3	[1] 151.0	(2)	92.5	+.2		+63.6
Nonferrous metals	130.5	129.3	85.7	74.6	+.9	+62.3	+74.9
Plumbing and heating	117.0	114.9	95.0	79.3	+1.8	+23.2	+47.5
Building materials	169.7	157.8	120.0	89.6	+7.5	+41.4	+89.4
Brick and tile	132.2	130.0	116.9	90.5	+1.7	+13.1	+46.1
Cement	108.3	106.9	101.1	91.3	+1.3	+7.1	+18.6
Lumber	249.9	227.2	158.5	90.1	+10.0	+57.7	+177.4
Paint and paint materials	171.2	155.4	107.8	82.1	+10.2	+58.8	+108.5
Plumbing and heating	117.0	114.9	95.0	79.3	+1.8	+23.2	+47.5
Structural steel	127.7	120.1	107.3	107.3	+6.3	+19.0	+19.0
Other building materials	139.0	131.8	106.6	89.5	+5.5	+30.4	+55.3
Chemicals and allied products	128.1	125.7	96.0	74.2	+1.9	+33.4	+72.6
Chemicals	112.7	111.8	97.1	83.8	+.8	+16.1	+34.5
Drugs and pharmaceuticals	181.7	181.2	112.1	77.1	+.3	+62.1	+135.7
Fertilizer materials	99.9	95.1	81.9	65.5	+5.0	+22.0	+52.5
Mixed fertilizer	95.5	93.6	86.6	73.1	+2.0	+10.3	+30.6
Oils and fats	210.6	203.0	101.7	40.6	+3.7	+107.1	+418.7
Housefurnishings goods	123.3	120.2	106.2	85.6	+2.6	+16.1	+44.0
Furnishings	128.4	126.3	109.7	90.0	+1.7	+17.0	+42.7
Furniture	118.2	113.9	102.8	81.1	+3.8	+15.0	+45.7
Miscellaneous	110.3	108.9	95.3	73.3	+1.3	+15.7	+50.5
Automobile tires and tubes	73.0	73.0	73.0	60.5	0	0	+20.7
Cattle feed	181.7	193.8	159.6	68.4	−6.2	+13.8	+165.6
Paper and pulp	141.9	136.4	112.0	80.0	+4.0	+26.7	+77.4
Rubber, crude	51.2	46.2	46.2	34.9	+10.8	+10.8	+46.7
Other miscellaneous	118.1	117.0	98.9	81.3	+.9	+19.4	+45.3
Raw materials	152.1	153.2	118.3	66.5	−.7	+28.6	+128.7
Semimanufactured articles	138.8	136.2	97.6	74.5	+1.9	+42.2	+86.3
Manufactured products	[1] 136.7	[1] 135.7	102.9	79.1	+.7	+32.8	+72.8
All commodities other than farm products	[1] 136.1	[1] 134.8	101.9	77.9	+1.0	+33.6	+74.7
All commodities other than farm products and foods	[1] 127.6	[1] 124.7	100.8	80.1	+2.3	+26.6	+59.3

[1] Includes current motor vehicle prices.

Motor vehicles.—the rate of production of motor vehicles in October 1946 exceeded the monthly average rate of civilian production in 1941, and in accordance with the announcement in the September release the Bureau introduced current prices for motor vehicles in the October calculations. During the war, motor vehicles were not produced for general civilian sales and the Bureau carried April 1942 prices forward in each computation through September 1946.

If April 1942 prices of motor vehicles had been used after September 1946, the indexes for the groups of which motor vehicles is a component would have been:

	Indexes (1926=100)	
	January	*December*
All commodities	139.5	139.0
Metals and metal products	123.7	120.5
Manufactured products	133.5	132.5
All commodities other than farm products	133.7	132.4
All commodities other than farm products and foods	124.4	121.6

These special indexes will be published as long as the need for them continues.

[2] Not available.

Index Numbers by Commodity Groups, 1926 to January 1947

Index numbers of wholesale prices by commodity groups for selected years from 1926 to 1946, and by months from January 1946 to January 1947 are shown in table 2.

TABLE 2.—*Index numbers of wholesale prices by groups of commodities*

[1926=100]

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting materials	Metals and metal products	Building materials	Chemicals and allied products	House-furnishing goods	Miscellaneous	All commodities
1926	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1929	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6	95.3
1932	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4	64.8
1933	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.1	75.8	62.5	65.9
1936	80.9	82.1	95.4	71.5	76.2	87.0	86.7	78.7	81.7	70.5	80.8
1937	86.4	85.5	104.6	76.3	77.6	95.7	95.2	82.6	89.7	77.8	86.3
1938	68.5	73.6	92.8	66.7	76.5	95.7	90.3	77.0	86.8	73.3	78.6
1939	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	86.3	74.8	77.1
1940	67.7	71.3	100.8	73.8	71.7	95.8	94.8	77.0	88.5	77.3	78.6
1941	82.4	82.7	108.3	84.8	76.2	99.4	103.2	84.4	94.3	82.0	87.3
1942	105.9	99.6	117.7	96.9	78.5	103.8	110.2	95.5	102.4	89.7	98.8
1943	122.6	106.6	117.5	97.4	80.8	103.8	111.4	94.9	102.7	92.2	103.1
1944	123.3	104.9	116.7	98.4	83.0	103.8	115.5	95.2	104.3	93.6	104.0
1945	128.2	106.2	118.1	100.1	84.0	104.7	117.8	95.2	104.5	94.7	105.8
1946	148.9	130.7	137.2	116.3	90.1	115.5	132.6	101.4	111.6	100.3	121.1
1946											
January	129.9	107.3	119.4	101.6	84.9	105.7	120.0	96.0	106.2	95.3	107.1
February	130.8	107.8	119.6	102.2	85.1	106.6	120.9	95.9	106.5	95.6	107.7
March	133.4	109.4	119.8	104.7	85.0	108.4	124.9	96.0	106.9	95.6	108.9
April	135.4	110.8	119.8	107.9	86.1	108.8	126.5	96.1	107.5	95.7	110.2
May	137.5	111.5	120.4	108.8	86.1	109.4	127.8	96.5	108.3	97.0	111.0
June	140.1	112.9	122.4	109.2	87.8	112.2	129.9	96.4	110.4	98.5	112.9
July	157.0	140.2	141.2	118.1	90.3	113.3	132.1	99.3	111.9	101.3	124.7
August	161.0	149.0	138.9	124.0	94.4	114.0	132.7	98.4	112.6	102.0	129.1
September	154.3	131.9	141.6	125.7	94.3	114.2	133.8	98.4	113.6	102.1	124.0
October	165.3	157.9	142.4	128.6	94.2	125.8	134.8	99.9	115.3	104.0	134.1
November	169.8	165.4	172.5	131.3	94.5	130.2	145.5	118.9	118.2	106.5	139.7
December	168.1	160.1	176.7	134.7	96.1	134.7	157.8	125.7	120.2	108.9	140.9
1947											
January	165.0	156.2	175.1	136.6	97.7	138.0	169.7	128.1	123.3	110.3	141.5

The price trend for specified years and months since 1926 is shown in table 3 for the following groups of commodities: Raw materials, semimanufactured articles, manufactured products, commodities other than farm products, and commodities other than farm products and foods. The list of commodities included under the classifications "Raw materials," "Semimanufactured articles," and "Manufactured products" was shown on pages 10 and 11 of Wholesale Prices, July-December and Year 1943 (Bulletin No. 785).

TABLE 3.—*Index numbers of wholesale prices by special groups of commodities*

[1926=100]

Year and month	Raw materials	Semimanufactured articles	Manufactured products	All commodities other than farm products	All commodities other than farm products and foods	Year and month	Raw materials	Semimanufactured articles	Manufactured products	All commodities other than farm products	All commodities other than farm products and foods
1926	100.0	100.0	100.0	100.0	100.0	*1946*					
1929	97.5	93.9	94.5	93.3	91.6	January	118.3	97.6	102.9	101.9	100.8
1932	55.1	59.3	70.3	68.3	70.2	February	118.9	98.8	103.4	102.5	101.3
1933	56.5	65.4	70.5	69.0	71.2	March	120.5	100.4	104.5	103.4	102.2
1936	79.9	75.9	82.0	80.7	79.6	April	122.2	101.1	105.5	104.5	103.3
						May	123.6	101.9	106.1	105.1	103.9
1937	84.8	85.3	87.2	86.2	85.3	June	126.3	105.7	107.3	106.7	105.6
1938	72.0	75.4	82.2	80.6	81.7	July	141.7	110.2	118.9	117.5	109.5
1939	70.2	77.0	80.4	79.5	81.3	August	145.7	111.9	123.9	121.9	111.6
1940	71.9	79.1	81.6	80.8	83.0	September	141.4	115.0	117.2	117.2	112.2
1941	83.5	86.9	89.1	88.3	89.0	October	148.7	118.2	129.6	127.1	115.8
						November	153.4	129.1	134.7	132.9	120.7
1942	100.6	92.6	98.6	97.0	95.5	December	153.2	136.2	135.7	134.8	124.7
1943	112.1	92.9	100.1	98.7	96.9						
1944	113.2	94.1	100.8	99.6	98.5	*1947*					
1945	116.8	95.9	101.8	100.8	99.7	January	152.1	138.8	136.7	136.1	127.6
1946	134.7	110.8	116.1	114.9	109.5						

Weekly Fluctuations

Weekly changes in wholesale prices by groups of commodities during December 1946 and January 1947 are shown by the index numbers in table 4. These indexes are not averaged to obtain an index for the month but are computed only to indicate the fluctuations from week to week.

TABLE 4.—*Weekly index numbers of wholesale prices by commodity groups, December 1946 and January 1947*

[1926=100]

Commodity group	Jan. 25	Jan. 18	Jan. 11	Jan. 4	Dec. 28	Dec. 21	Dec. 14	Dec. 7
All commodities	140.3	140.8	140.0	139.1	139.6	139.8	139.7	139.1
Farm products	164.2	166.0	165.8	166.1	167.7	170.7	168.7	169.2
Foods	155.9	157.8	158.1	156.4	159.1	159.5	161.3	161.7
Hides and leather products	170.7	171.7	171.2	171.3	171.3	170.9	170.7	166.9
Textile products	135.7	135.7	133.2	133.5	133.3	132.8	132.5	131.7
Fuel and lighting materials	98.5	98.3	98.0	97.0	97.0	96.9	96.1	96.0
Metals and metal products	137.7	136.7	135.5	134.2	133.9	133.3	132.7	132.2
Building materials	165.5	164.5	158.1	156.1	154.6	151.9	151.1	145.2
Chemicals and allied products	127.4	127.1	126.8	126.6	126.1	125.6	125.4	124.0
Housefurnishing goods	122.5	122.4	121.4	120.9	120.5	120.5	120.0	118.7
Miscellaneous	110.0	109.5	109.0	107.8	107.7	108.1	107.9	106.9
Raw materials	152.1	153.3	153.1	153.1	154.2	155.5	154.3	154.4
Semimanufactured articles	138.6	137.8	135.9	135.1	135.0	134.4	133.7	131.6
Manufactured products	136.0	136.4	135.4	134.1	134.5	134.2	134.8	134.0
All commodities other than farm products	135.1	135.3	134.4	133.2	133.5	133.0	133.4	132.5
All commodities other than farm products and foods	127.0	126.6	125.0	124.1	123.9	123.4	122.9	121.6

Construction

Construction Activity, December 1946 and January-February 1947

The Housing Program

THE 59,300 new permanent nonfarm dwelling units completed in January 1947, brought to 513,100 the number of dwellings made ready for occupancy since the beginning of 1946. This was over three times as many as were completed in January a year ago. The continuing upward trend in completions had decreased still further the number of homes under construction—326,400 by the end of January as compared with 343,000 at the close of December. The new permanent dwellings discussed here account for about two in every three of all the units begun and completed during the Veterans' Emergency Housing Program. The VEHP includes, in addition to the new permanent units, conversion, trailer, and temporary re-use accommodations.

With the relaxation of controls in December, most of the burden for solution of the country's housing problem passed from Government supervision to private builders. Of advantage to builders was a steady improvement in the flow of materials which already appears to be narrowing the elapsed time between starting and completing a project. In addition, the accelerated apprentice training program promises to enlarge the supply of skilled labor. Under conditions more favorable than for some time, builders started 42,100 new permanent homes in January—1,700 more than were begun in December and 6,000 more than in January 1946.

Employment on the site of new residential construction dropped by 62,000 workers during January to a total of 464,000. There was a decline also in expenditures for new home construction from 348 to 313 million dollars. Preliminary estimates indicate a further drop in February. However, the rise in housing starts which began in January is expected to continue throughout most of the year and probably will cause employment and expenditures on new residential building to begin rising in March.

TABLE 1.—*Estimated number of family-dwelling units or equivalent living accommodations [1] started and completed in nonfarm areas, January–December 1946, and January 1947 [2]*

Year and month	Number of units					
	Started			Completed		
	Total	New permanent family dwellings	Other	Total	New permanent family dwellings	Other
1946: Total	1,000,700	[3] 670,900	[4] 329,800	657,700	[5] 453,800	[6] 203,900
January	49,600	36,100	13,500	24,900	18,700	6,200
February	56,100	43,100	13,000	28,000	20,300	7,700
March	86,400	60,400	26,000	31,200	22,600	8,600
April	97,600	66,100	31,500	35,600	26,400	9,200
May	105,000	67,600	38,000	39,900	30,300	9,600
June	93,500	63,600	29,900	46,600	34,900	11,700
July	107,900	64,300	43,600	54,300	41,000	13,300
August	107,100	64,400	42,700	59,300	42,200	17,100
September	101,000	57,100	43,900	81,100	49,800	31,300
October	80,000	58,100	21,900	85,000	54,500	30,500
November	64,000	49,700	14,300	81,600	55,100	26,500
December	51,900	40,400	11,500	90,200	58,000	32,200
1947: January [7]	53,500	[8] 42,100	[9] 11,400	94,300	[6] 59,300	[10] 35,000

[1] Excludes military barracks.

[2] Source: Estimates for prefabricated units are from the National Housing Agency and Office of the Housing Expediter; privately financed conversion units and Federal re-use (moved and converted) units, from the National Housing Agency; and trailers from the Bureau of the Census. All other estimates are from the U. S. Bureau of Labor Statistics.

[3] Includes 8,027 permanent units started by New York City Housing Authority, and 37,200 prefabricated units.

[4] Covers 64,500 privately financed converted units; 191,000 Federal (Mead-Lanham temporary housing program) re-use units (147,100 family dwellings and 43,900 family equivalent dormitory units: a family-equivalent unit is defined as one family or two dormitory accommodations); 47,100 trailers; and 27,200 family-equivalent units financed by various State and local public bodies and educational institutions, which are not included under the Federal Mead-Lanham temporary housing program. Of units started in 1946, 600 family equivalent dormitory units have been abandoned, but it is quite probable that work on these units will be reactivated.

[5] Break-down not available for conventional and prefabricated units.

[6] Covers 45,300 conversion units, 101,900 re-use units, of which 77,000 were family dwellings, 47,100 trailers, and 9,600 local emergency family-equivalent units.

[7] Preliminary.

[8] Includes 1,084 permanent units started by New York City Housing Authority. Break-down not available for conventional and prefabricated units.

[9] Covers 2,500 conversion units; 5,200 trailers; 3,200 Federal (Mead-Lanham temporary housing program) re-use units; and 500 family-equivalent units financed by various State and local public bodies and educational institutions.

[10] Covers 6,000 conversion units; 5,200 trailers; 22,600 Federal re-use equivalent units, and 1,200 local emergency family-equivalent units.

Total Construction Activity

Construction employment and expenditures in February 1947, according to preliminary estimates, continued the down-trend which started last October. February expenditures of 858 million dollars for work put in place was 70 million dollars less than in January, and February employment declined by 121,000 workers to 1,521,000. While there is an urgent need for practically all types of construction, and contractors in many instances may have had building sites and plans completed for projects, uncertainty in costs of both material and labor, in all probability, deferred carrying many projects beyond the planning stage.

Privately financed new construction, which accounted for 81 percent of total new construction in February, dropped 32 million dollars during the month to 601 million dollars. Residential and nonresidential building shared equally in the drop. Farm construction and public utility work were the only construction classes maintaining their level of expenditures and employment during the month.

Expenditures for all types of new construction in February 1947, however, were 46 percent higher than in February 1946, and for new residential building, expenditures were 44 percent higher. Over 200,000 more workers were employed on new construction this February than a year ago, half of them on privately financed housing.

TABLE 2.—*Estimated construction employment [1] in the United States, selected months in 1946 and 1947*

Type of project	Estimated employment (in thousands)			
	February 1947 [2]	January 1947 [3]	December 1946 [3]	February 1946 [3]
All types	1,521	1,642	1,846	1,364
New construction	1,339	1,444	1,606	1,128
Private construction	1,068	1,128	1,226	942
Residential (nonfarm) building	432	460	501	336
Nonresidential building	458	489	536	477
Farm construction	22	22	22	17
Public utilities	156	157	167	113
Public construction [4]	271	316	380	186
Residential building	62	82	113	9
Nonresidential building	39	44	50	74
Reclamation	14	13	13	7
River, harbor, and flood control	24	26	29	18
Streets and highways	75	87	107	36
All other [5]	57	64	68	42
Minor building repairs	182	198	240	236
Residential	48	51	62	74
Nonresidential	87	93	102	119
Farm construction	47	54	76	43

[1] Estimates include wage earners, salaried employees, and special trades contractors actively engaged on new construction, additions, and alterations, and on repair work of the type usually covered by building permits, whether performed under contract or by force-account. (Force-account employees are workers hired directly by the owner and utilized as a separate work force to perform construction work of the type usually chargeable to capital account.) These figures should not be confused with those included in the Bureau's nonagricultural employment series, which covers only employees of construction contractors and Federal force-account workers, and excludes force-account workers of State and local governments, public utilities, and private firms.

[2] Preliminary.

[3] Revised.

[4] Includes the following force-account employees hired directly by the Federal Government: 16,400 in February 1946; 20,400 in December 1946; 21,600 in January 1947, and 21,000 in February 1947.

[5] Includes airports, water supply and sewage disposal systems, electrification projects, community buildings, and miscellaneous public service enterprises.

TABLE 3.—*Estimated construction expenditures,[1] in the United States, selected months in 1946 and 1947*

Type of construction	Estimated expenditures (in millions)					
	February 1947 [2]	January 1947 [3]	December 1946 [3]	February 1946 [3]	First 2 months of—	
					1947 [2]	1946 [3]
All types	$858	$928	$1,038	$627	$1,786	$1,216
New construction [4]	743	801	889	510	1,544	984
Private construction	601	633	688	430	1,234	815
Residential nonfarm	256	273	297	159	529	295
Nonresidential	259	275	296	212	534	401
Industrial	152	159	166	108	311	208
Commercial	62	69	80	71	131	130
All other	45	47	50	33	92	63
Farm construction	10	10	10	8	20	16
Public utilities	76	75	85	51	151	103
Public construction	142	168	201	80	310	169
Residential building	29	40	51	5	69	8
Nonresidential building	19	22	23	21	41	46
Industrial [5]	4	5	5	7	9	16
All other	15	17	18	14	32	30
Military and naval	11	13	16	13	24	31
Highway	45	50	66	19	95	37
Other public	38	43	45	22	81	47
Federal [6]	18	19	21	12	37	24
State and local [7]	20	24	24	10	44	23
Minor building repairs [8]	115	127	149	117	242	232
Residential nonfarm	30	32	35	35	62	65
Nonresidential	50	55	60	53	105	108
Farm construction	35	40	54	29	75	59

[1] Estimated construction expenditures represent the monetary value of work put in place in continental United States during the period indicated. These figures should not be confused with the data on value of construction reported in the table on urban building construction (table 4).
[2] Preliminary.
[3] Revised.
[4] Estimates of new construction were prepared jointly by the Bureau of Labor Statistics and the Office of Domestic Commerce (a successor to the Bureau of Foreign and Domestic Commerce) and include expenditures for new construction, major additions, and alterations.
[5] Expenditures for floating dry docks and facilities for the production of atomic bombs are excluded.
[6] Mainly river, harbor, flood control, reclamation, and power projects.
[7] Includes water supply, sewage disposal, and miscellaneous public-service enterprises.
[8] Covers privately financed structural repairs of the type for which building permits are generally required.

Urban Building

The permit valuation of building construction in urban areas (including the value of Federal construction contracts awarded) increased to 261 million dollars in January 1947, after declining steadily since last August. The advance over December 1946 amounted to 35 million dollars and was shared by all types of building. Almost two-thirds of the increase was accounted for by the 21-percent rise in new residential building valuations, which climbed from 109 million to 132 million dollars, reflecting the relaxation of housing controls late in December. New nonresidential building increased from 75 to 80 million dollars during the month, while additions, alterations, and repairs rose 17 percent from 42 to 49 million dollars.

Two important private housing projects for which permits were issued in urban areas were a garden apartments project providing 150 units in Maplewood, N. J., to cost $930,000, and another similar

type project for 142 units in Richmond, Va., to cost $846,480. The largest city residential project recorded in January was a public project of the New York City Housing Authority to provide 1,084 units in Manhattan Borough. Two additional projects of interest were a group of Quonset huts containing 150 units to be set up at Stamford, Conn., and a group of 60 prefabricated 1-family dwellings to be erected in Irvington, N. J. Among the important nonresidential construction projects were three buildings valued at between 1½ and 2½ million dollars: (1) an insurance office building at Hartford, Conn.; (2) a clothing factory at Rochester, N. Y.; and (3) a newspaper plant at Portland, Oreg. A Veterans Administration Hospital (valued at over 3 million dollars), for general medical and surgical treatment, was to be erected at Grand Junction, Colo.

Urban building in 1946.—The dollar value of city building construction reached an 18-year high in 1946. Permits issued (and Federal contracts awarded) for building construction in all urban places in 1946 were valued at 4.7 billion dollars—more than double the 1945 total and the greatest dollar volume reported since the 1920's. This high level is due in part to current high construction costs.

Residential building, rising from 769 million to 2,442 million dollars, accounted for the largest part of the gain over 1945. Nonresidential building, although restricted by control orders, advanced 70 percent to 1.5 billion dollars; additions, alterations, and repairs rose only slightly to 765 million dollars.

Home construction accounted for more than half the total dollar volume in 1946, while nonresidential building represented less than a third. Prior to March 26, when the Veterans' Housing Program Order No. 1 (the construction limitation order) was issued, commercial and industrial building had been surging ahead of housing. Builders' efforts to get work started on higher-priced homes and nonhousing construction before controls went into effect resulted in an all-time high of 742 million dollars for all urban permit valuation in March 1946. The total valuation figure in April sank to 433 million dollars.

Federally financed construction within city limits in 1946 amounted to 381 million dollars—less than a tenth of total urban building valuation—and was almost entirely for buildings to provide temporary emergency housing for veterans.

Priority regulations limiting the selling price of private homes to $10,000 became effective in April. As a result, average permit valuations of privately financed single-family dwellings, which had been mounting ever since relaxation of cost ceilings immediately after the war, declined somewhat in April and remained about the same until early fall. Since labor and material costs, in general, continued to rise, this indicates that throughout the summer permits were granted for a greater proportion of smaller, or less elaborate, houses. During the last quarter of 1946, there was an upturn in average permit valuation.

TABLE 4.—*Permit valuation [1] of urban building construction,[2] by class of construction and by source of funds, December and January 1946, and January 1947*

Class of construction	Valuation (in millions)		
	January 1947 [3]	December 1946 [4]	January 1946 [4]
	Total		
All building construction	$261	$226	$320
New residential [5]	132	109	140
New nonresidential	80	75	123
Additions, alterations, and repairs	49	42	57
	Non-Federal		
All building construction	249	221	304
New residential [5]	125	109	124
New nonresidential	76	71	123
Additions, alterations, and repairs	48	41	57
	Federal		
All building construction	[6] 12	5	[7] 16
New residential [5]	[6] 7	([8])	[7] 16
New nonresidential	4	4	([8])
Additions, alterations, and repairs	1	1	([8])

[1] Includes value of Federal construction contracts awarded.
[2] Estimates of non-Federal (private, and State and local government) urban building construction are based upon building-permit reports received from places containing about 85 percent of the urban population of the country; estimates of federally financed projects are compiled from notifications of construction contracts awarded, which are obtained from other Federal agencies.
[3] Preliminary.
[4] Revised.
[5] Includes value of dormitories and other nonhousekeeping residential buildings in addition to housekeeping units.
[6] Includes $7,264,000, the estimated cost of 1,084 dwelling units in New York City Housing Authority projects. This project, although financed solely with city funds, is included with other Federal projects in order to segregate public from private housing. All other types of building construction financed with State or local government funds are included under "Non-Federal."
[7] Includes $1,788,000, the estimated cost of 608 dwelling units contained in New York City Housing Authority projects.
[8] Less than $500,000.

TABLE 5.—*Estimated number and permit valuation [1] of new dwelling units scheduled to be started in all urban areas,[2] December and January 1946, and January 1947*

Source of funds and type of dwelling	January 1947 [3]	December 1946 [4]	January 1946 [4]
	Number of dwelling units		
All dwellings	25,301	21,369	31,539
Privately financed	24,217	21,369	25,940
1-family	20,497	17,469	21,807
2-family [5]	1,458	977	1,323
Multifamily [6]	2,262	2,923	2,810
Federally financed [7]	1,084	0	5,599
	Valuation (in thousands)		
All dwellings	$131,239	$108,284	$135,170
Privately financed	123,975	108,284	119,385
1-family	108,134	92,385	105,261
2-family [5]	6,129	4,447	5,011
Multifamily [6]	9,712	11,452	9,113
Federally financed [7]	7,264	0	15,785

[1] Includes value of Federal construction contracts awarded.
[2] See table 4, footnote 2, for source of urban estimates.
[3] Preliminary.
[4] Revised.
[5] Includes 1- and 2-family dwellings with stores.
[6] Includes multifamily dwellings with stores.
[7] For number of, and estimated cost of, dwelling units contained in New York City Housing Authority projects, but included here with Federally financed housing, see table 4, footnotes 6 and 7.

Hours and Earnings

In December 1946, average hourly and weekly earnings in private building construction reached a 7-year peak—the average hourly pay of $1.57 and the average weekly pay of $60.32 being the highest recorded since January 1940, when monthly data first became available. The workweek lengthened during December (1⅞ hours) to an average of 38.4 hours. Earnings reported are for all classes of workers together—skilled, semiskilled, and unskilled.

Wage controls, along with practically all price controls, were rescinded on November 9, 1946. Results of this action were reflected somewhat in December reports of wage increases from both general building and special trades contractors. Some overtime was reported also. General building contractors paid average weekly earnings of $56.73 in December; for the special trades contractors the amount was $64.53. For each of these groups this represented an increase of 18 percent from December a year ago.

In the special building trades, wage increases during the year and a somewhat longer workweek in December resulted in increased weekly earnings, from the level of a year ago: an increase of $15.34, to $63.13, for plasterers; of $13.22, to $58.36, for masonry workers; and of $11.70, to $67.44, for plumbers. The increase over December 1945 was not quite as large for electrical workers ($9.54) but the longer workweek for this group, compared with other groups, resulted in average weekly

pay of almost $75 in December, helping it to maintain its position as the highest paid among those for which earnings are reported.

For nonbuilding construction, average hourly earnings remained at practically the same level as in November, but a longer workweek resulted in higher average weekly earnings for the month—$58.02 in December compared with $56.13 in November.

Reports are received monthly from over 11,000 different contractors. Data published are summaries of all reports received during the months shown and do not necessarily represent reports from identical firms.

TABLE 6.—*Average hours and earnings on private construction projects for selected types of work, December 1946* [1]

[Subject to revision]

Type of work	Average hours per week			Average weekly earnings [2]			Average hourly earnings		
	December 1946	November 1946	December 1945 [3]	December 1946	November 1946	December 1945 [3]	December 1946	November 1946	December 1945 [3]
All types of work	38.8	37.6	(4)	$59.92	$57.38	(4)	$1.545	$1.527	(4)
Building construction	38.4	37.2	37.1	60.32	57.65	$51.79	1.569	1.549	$1.395
General contractors	38.0	36.8	35.8	56.73	54.68	47.92	1.495	1.485	1.337
Special building trades [5]	40.0	37.7	38.1	64.53	61.11	54.83	1.655	1.622	1.441
Plumbing and heating	40.8	38.6	40.3	67.44	62.62	55.74	1.655	1.620	1.382
Painting and decorating	36.9	35.2	38.1	61.05	57.39	56.94	1.653	1.629	1.496
Electrical work	41.4	39.8	40.9	74.76	69.63	65.22	1.808	1.750	1.594
Masonry	37.5	37.4	31.9	58.36	57.56	45.14	1.556	1.541	1.415
Plastering and lathing	38.7	35.3	35.3	71.04	63.13	55.70	1.837	1.788	1.577
Carpentry	38.2	38.3	38.4	57.85	57.64	53.08	1.513	1.504	1.384
Roofing and sheet metal	36.4	36.1	34.4	52.84	50.95	46.00	1.450	1.413	1.335
Excavation and foundation	37.9	36.4	34.8	54.94	52.10	45.44	1.450	1.431	1.306
Nonbuilding construction	40.5	39.2	(4)	58.02	56.13	(4)	1.434	1.433	(4)
Highway and streets	39.9	39.0	(4)	55.19	53.24	(4)	1.383	1.366	(4)
Heavy construction	40.3	39.0	(4)	59.11	57.41	(4)	1.466	1.470	(4)
Other	41.4	39.8	(4)	57.44	54.96	(4)	1.387	1.381	(4)

[1] Includes all firms reporting during the months shown (over 11,000) but not necessarily identical establishments. The data cover all classes of workers—skilled, semiskilled, and unskilled.
[2] Hourly earnings when multiplied by weekly hours of work may not exactly equal weekly earnings because of rounding.
[3] Revised.
[4] Not available prior to February 1946.
[5] Includes types not shown separately.

Trends of Employment and Labor Turn-Over

Labor Force, January 1947

WHO IS COUNTED IN THE LABOR FORCE

Labor force.—Persons 14 years of age and over who are employed or unemployed during the census week (the week containing the eighth day of the month).

Employees.—Those who, during the census week (1) work full or part time for pay or profit; (2) work without pay in a family enterprise (farm or business) at least 15 hours; or (3) have a job but do not work because of illness, vacation labor-management dispute, bad weather, or lay-off with definite instructions to return to work within 30 days.

Unemployed.—Those not working, but seeking a job.

The civilian labor force declined by 640,000 between December and January to a total of 57,790,000, according to the Bureau of the Census Monthly Report on the Labor Force. Employment dropped by 920,000 during the month, while unemployment increased by 280,000, to reach 2,400,000.

Seasonal declines in both farm and nonfarm activity accounted for the sharp decline in employment between December and January. Employment in agriculture, which normally reaches its low point at this time of year, dropped by 710,000 during the month. The number of persons with nonfarm jobs declined by 210,000 during the same period, principally because of post-Christmas curtailment in trade. The number actually at work in nonagricultural activities declined by an additional 370,000 as workers in construction and other outdoor industries were kept off the job by bad weather.

It is significant that nonagricultural employment of women in January, 14,830,000, is slightly above the level of January 1946. The withdrawal of "extra" women workers from the nonfarm labor force had apparently been completed by mid-1946. Since then, except for the normal seasonal movements, there has been a slight

increase in their labor-market participation. The current level is about 2,000,000 below the VJ-day total, but it is 2,000,000 above the combined total of women working or seeking work in nonfarm jobs in 1940.

Unemployment showed the usual seasonal increase between December and January. With farming, construction, trade and other industries in the midst of their winter slack period, the number of job seekers was almost half a million above the 1946 low reached last November. At the start of 1947, approximately 1,960,000 men (including 900,000 veterans) and 450,000 women were looking for work. These figures correspond closely to year-ago levels, despite the entry of over 5,000,000 veterans into the labor force during 1946.

Total labor force of the United States, classified by employment status, hours worked, and sex, December and January 1946 and January 1947

[Source: U. S. Department of Commerce, Bureau of the Census]

Item	Estimated number (in thousands) of persons 14 years of age and over [1]								
	Total, both sexes			Male			Female		
	Dec. 1946	Jan. 1947	Jan. 1946	Dec. 1946	Jan. 1947	Jan. 1946	Dec. 1946	Jan. 1947	Jan. 1946
Total labor force [2]	60,320	59,510	59,490	43,860	43,560	43,220	16,460	15,950	16,270
Civilian labor force	58,430	57,790	53,320	41,990	41,860	37,160	16,440	15,930	16,160
Unemployment	2,120	2,400	2,300	1,690	1,950	1,770	430	450	530
Employment	56,310	55,390	51,020	40,300	39,910	35,390	16,010	15,480	15,630
Nonagricultural	49,100	48,890	44,300	34,010	34,060	29,550	15,090	14,830	14,750
Worked 35 hours or more	42,120	41,500	36,670	30,290	29,910	25,330	11,830	11,590	11,340
Worked 15–34 hours	4,290	4,280	4,360	2,120	2,200	2,190	2,170	2,080	2,170
Worked 1–14 hours [3]	1,350	1,400	1,320	600	660	640	750	740	680
With a job but not at work [4]	1,340	1,710	1,950	1,000	1,290	1,390	340	420	560
Agricultural	7,210	6,500	6,720	6,290	5,850	5,840	920	650	880
Worked 35 hours or more	5,150	4,040	4,180	4,860	3,850	3,910	290	190	270
Worked 15–34 hours	1,450	1,700	1,710	950	1,330	1,240	500	370	470
Worked 1–14 hours [3]	320	300	350	220	250	290	100	(*)	(*)
With a job but not at work [4]	290	460	480	260	420	400	(*)	(*)	(*)

[1] Estimates are subject to sampling variation, which may be large in cases where the quantities shown are relatively small. Therefore, the smaller estimates should be used with caution; those under 100,000 are not presented in the table but are replaced with an asterisk (*). All data exclude persons in institutions.

[2] Total labor force consists of the civilian labor force and the armed forces. Estimates of the armed forces during the census week are projected from data on net strength as of the first of the month.

[3] Excludes persons engaged only in incidental unpaid family work (less than 15 hours); these persons are classified as not in the labor force.

[4] Includes persons who had a job or business, but who did not work during the census week because of illness, bad weather, vacation, labor dispute, or because of temporary lay-off with definite instructions to return to work within 30 days of lay-off. Does not include unpaid family workers.

Summary of Employment Reports for January 1947

A SEASONAL DECLINE of 1,256,000 in the number of employees in nonagricultural establishments brought the total to 39,470,000 in January 1947. This drop from December 1946 employment reflects primarily seasonal decreases in trade, Government post offices, and construction, which are of the same magnitude as in previous years.

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After the settlement of the coal strike, mining reported a modest increase in employment. Manufacturing showed an increase of 22,000 as compared with the decrease which usually occurs in January.

Industrial and Business Employment

Among the major manufacturing industries, the largest increase in employment—29,000 production workers—was reported by the iron and steel group. This increase reflects not only the settlement of the coal strike, which made possible expanded operations of blast furnaces—but also a real gain over November. This gain, which offset much of the seasonal declines in other manufacturing groups, indicates further expansion in the metal-fabricating industries.

The women's clothing and millinery industries contributed most to the 12,000 employment gain in apparel between December 1946 and January 1947. Record employment of 1,111,000 was reported in apparel in January.

The largest decline in January was the seasonal drop in the food-processing industries. The canning industry alone accounted for about half the decrease of 41,000, and the beet-sugar industry for about a fourth; the remainder was spread among most of the other industries comprising the food group.

The automobile industry reported a 11,000 reduction in employment due to the taking of inventories, model change-overs, and material shortages. Employment in this industry was lower in January 1947 than at any time since July 1946.

TABLE 1.—*Estimated number of employees in nonagricultural establishments, by industry division*

Industry division	Estimated number of employees (in thousands)			
	Jan. 1947	Dec. 1946	Nov. 1946	Jan. 1946
Total estimated employment [1]	39,470	40,726	40,381	37,013
Manufacturing [2]	15,048	15,026	14,959	13,236
Mining	827	819	828	810
Contract construction and Federal force-account construction	1,435	1,617	1,808	1,132
Transportation and public utilities	3,933	3,976	4,005	3,807
Trade	7,866	8,589	8,267	7,481
Finance, service, and miscellaneous	5,193	5,260	5,244	4,984
Federal, State, and local government, excluding Federal force-account construction	5,168	5,439	5,270	5,473

[1] Estimates include all full- and part-time wage and salary workers in nonagricultural establishments who worked or received pay during the pay period ending nearest the 15th of the month. Proprietors, self-employed persons, domestic servants, and personnel of the armed forces are excluded.

[2] Estimates for manufacturing have been adjusted to levels indicated by final 1944 data made available by the Bureau of Employment Security of the Federal Security Agency and are comparable with the production-worker estimates shown in table 2.

TABLE 2.—*Estimated number of production workers and indexes of production-worker employment in manufacturing industries, by major industry group* [1]

Group	Estimated number of production workers (in thousands)		Production-worker indexes (1939=100)	
	January 1947	January 1946	January 1947	January 1946
All manufacturing	12,269	10,666	149.8	130.2
Durable goods	6,249	5,205	173.1	144.1
Nondurable goods	6,020	5,461	131.4	119.2
Iron and steel and their products	1,491	1,308	150.4	131.9
Electrical machinery	575	476	222.0	183.7
Machinery, except electrical	1,127	956	213.2	180.9
Transportation equipment, except automobiles	456	519	287.1	326.9
Automobiles	722	416	179.4	103.5
Nonferrous metals and their products	412	333	179.9	145.3
Lumber and timber basic products	639	514	152.0	122.3
Furniture and finished lumber products	413	348	126.0	106.0
Stone, clay, and glass products	414	335	140.9	114.3
Textile-mill products and other fiber manufactures	1,252	1,127	109.5	98.6
Apparel and other finished textile products	1,111	956	140.7	121.0
Leather and leather products	365	338	105.2	97.4
Food	1,080	1,051	126.4	123.0
Tobacco manufactures	89	81	95.8	87.0
Paper and allied products	383	341	144.2	128.6
Printing, publishing, and allied industries	400	359	122.1	109.4
Chemicals and allied products	508	489	176.3	169.7
Products of petroleum and coal	150	142	141.3	134.0
Rubber products	246	209	203.5	172.7
Miscellaneous industries	436	368	178.2	150.4

[1] The estimates and indexes presented in this table have been adjusted to levels indicated by the final 1944 data made available by the Bureau of Employment Security of the Federal Security Agency.

Public Employment

Civilian.—The usual after-Christmas decline in temporary postal workers was accompanied this year by employment declines in the War and Navy Departments and in a few of the other war agencies, mainly the Office of Price Administration as it was absorbed by the newly created Office of Temporary Controls. In the face of rigid Budget Bureau employment ceilings, few peacetime agencies ventured to add employees, the Veterans Administration, with an increase of 5,000, being the notable exception.

The over-all change in Federal employment between December 1946 and January 1947, a decline of 282,000, brought the total to 2.3 million, the lowest point since mid-1942.

In the Washington, D. C., area, a sharp downward movement occurred which, aside from the decline in the temporary postal group and one of 1,300 in the group of agencies consolidated into the Office of Temporary Controls, was scattered widely among the agencies.

During the year 1946, both the rate of entering and the rate of leaving full-time employment in the Federal service have shown marked declines in domestic areas. Hiring fell from 50 to 28 workers per thousand, while reductions for all reasons fell from 69 to 49 per thousand. Resignations, which amounted to 45 percent of all reductions

in December 1945, were down to 36 percent in December 1946. On the other hand, reductions-in-force and terminations went up in relative importance during the year period being considered, from 41 to 51 percent of all separations. Separations for military duty constituted a negligible proportion of the total.

During this period, resignations were a significantly greater proportion of all reductions in the Washington, D. C., area than in the country as a whole, and, conversely, reductions-in-force and terminations were a smaller proportion. Although, numerically, interagency transfers were much more important in the 48 States than in Washington, relative to total separations, such transfers were four to five times as important in Washington as in the rest of the country.

TABLE 3.—*Employment and pay rolls for regular Federal services and for Government corporations in selected months*

Year and month	Total	Executive [1]			Legislative	Judicial	Government corporations [2]
		All areas	Continental United States				
			Total	Washington, D. C., area			
	Employment [3]						
January 1940	990,514	956,423	911,457	126,926	5,535	2,268	26,288
January 1941	1,200,000	1,164,628	1,090,106	155,328	5,921	2,514	26,937
January 1942	1,688,711	1,649,716	1,507,061	207,226	6,290	2,593	30,112
January 1943	2,975,545	2,932,419	2,683,048	284,244	6,391	2,636	34,099
January 1944	3,268,321	3,223,028	2,811,750	263,433	6,133	2,665	36,495
January 1945	3,499,802	3,406,672	2,859,678	255,186	6,160	2,638	34,332
January 1946	2,973,297	2,929,899	2,378,916	229,389	6,401	3,011	33,986
October 1946 [4]	2,434,015	2,391,478	2,084,103	225,862	6,902	3,061	32,574
November 1946 [4 5]	2,400,290	2,357,755	2,049,287	224,742	6,896	3,079	32,560
December 1946 [5]	2,561,022	2,518,896	2,220,561	226,460	6,806	3,061	32,259
January 1947	2,278,824	2,236,913	1,948,071	221,339	6,864	3,066	31,981
	Pay rolls (in thousands) [6]						
January 1943	$607,388	$600,216	[8]	$60,940	$1,433	$708	$5,031
January 1944	693,348	685,490	$626,275	54,848	1,486	773	5,599
January 1945 [7]	697,247	689,461	632,396	54,415	1,593	744	5,449
January 1946 [7]	528,365	520,011	475,581	49,653	1,766	968	5,620
October 1946 [7]	537,044	528,024	492,549	56,941	2,115	1,083	5,822
November 1946 [7]	601,132	591,230	553,058	74,944	2,364	1,488	6,050
December 1946 [7]	542,058	532,698	497,396	57,716	2,169	1,248	5,943
January 1947 [7]	515,929	506,543	472,042	58,837	2,236	1,191	5,959

[1] Includes employees on force-account construction. Beginning July 1945, data include clerks at third-class post offices who previously were working on a contract basis. Data exclude substitute rural mail carriers.

[2] Data are for employees of the Panama R. R. Co., the Federal Reserve banks, and banks of the Farm Credit Administration. Data for other Government corporations are included under the executive service.

[3] Employment is as of the first of the calendar month.

[4] A downward revision of 6,000 to 37,000 in employment of the Post Office Department which affects data for October 1945–November 1946 has been taken into account in the data for the executive branch.

[5] Revised.

[6] Starting December 1946, pay rolls cover the entire calendar month. Previously, pay rolls were for all pay periods ending within the calendar month, or for 4 weeks for months starting July 1945, except for December 1945, June and November 1946 when pay rolls included pay for 5 weeks for most employees.

[7] Subject to revision.

[8] Data not available.

Military.—The pattern of stability characterizing the size of the armed forces in September–November 1946—the period immediately following the retention of enlisted personnel on the pay roll during their period of accrued and unused leave after separation from active duty (a practice authorized by Congress beginning September 1, 1946)—was broken in December and January with a drop of almost half a million persons. Roughly 2,000,000 persons remained on the military rolls on January 1, 1947; this was just below the Pearl Harbor level, which had been swollen by Selective Service inductions in the preceding 14-month period to approximately five times the usual peace-time level.

These year-end personnel changes are reflected in the pay rolls but are hard to trace in the mustering-out pay because individual payments are staggered over a period of 3 months. Apparently, payments to present military personnel for leave accrued in excess of 60 days passed the peak in December 1946 and will taper off to zero in the next few months. Payments to former enlisted personnel for accrued and unused leave at the time of discharge, however, rose $46,000,000 in January 1947 to a total of $302,000,000, and, conceivably, may go higher. Of the $318,000,000 paid in January 1947 for both these types of leave, only $23,000,000 was in cash, the remainder being in bonds whose ultimate payment in cash is being deferred for a period of at least 5 years.

Source of data.—Data for the Federal executive service are reported through the Civil Service Commission, whereas data for the legislative and judicial services and Government corporations are reported to the Bureau of Labor Statistics. Employment on Federal force-account construction is included in both the executive branch (tables 3 and 4) and in construction employment (table 2 in the section on Construction).

TABLE 4.—*Employment and pay rolls for the executive branch of the Federal Government in selected months* [1]

Year and month	All agencies	War agencies [2]			Other agencies [3]		
		Total	Continental United States	Outside Continental United States [4]	Total	Continental United States	Outside Continental United States [4]
	Employment [5]						
January 1940	956,423	242,492	208,419	34,073	713,931	703,038	10,893
January 1941	1,164,628	407,550	345,541	62,009	757,078	744,565	12,513
January 1942	1,649,716	829,571	708,704	120,867	820,145	798,357	21,788
January 1943	2,932,419	2,118,532	1,883,897	234,635	813,887	799,151	14,736
January 1944	3,223,028	2,404,647	2,010,024	394,623	818,381	801,726	16,655
January 1945	3,406,672	2,561,118	2,030,351	530,767	845,554	829,327	16,227
January 1946	2,929,899	1,945,206	1,416,285	528,921	984,693	962,631	22,062
October 1946 [6]	2,391,478	1,271,976	992,574	279,402	1,119,502	1,091,529	27,973
November 1946 [6] [7]	2,357,755	1,229,706	949,115	280,590	1,128,050	1,100,172	27,878
December 1946 [7]	2,518,896	1,176,596	906,763	269,833	1,342,300	1,313,798	28,502
January 1947	2,236,913	1,129,738	868,475	261,263	1,107,175	1,079,596	27,579
	Pay rolls (in thousands) [5]						
January 1943	$600,216	$448,605	(10)	(10)	$151,611	(10)	(10)
January 1944	685,490	520,643	$464,762	$55,881	164,847	$161,513	$3,334
January 1945 [8]	689,461	518,290	464,701	53,589	171,171	167,695	3,476
January 1946 [9]	520,011	321,448	282,707	38,741	198,563	192,875	5,688
October 1946 [9]	528,024	275,122	245,357	29,765	252,902	247,192	5,710
November 1946 [9]	591,230	266,749	236,938	29,811	324,481	316,120	8,361
December 1946 [9]	532,698	245,750	216,691	29,059	286,948	280,705	6,243
January 1947 [9]	506,543	242,404	214,391	28,013	264,139	257,651	6,488

[1] Includes employees on force-account construction.
[2] Covers War and Navy Departments, Maritime Commission, National Advisory Committee for Aeronautics, The Panama Canal, and the emergency war and reconversion agencies.
[3] Beginning July 1945, data include clerks at third-class post offices who previously were working on a contract basis. Data exclude substitute rural mail carriers.
[4] Includes Alaska and the Panama Canal Zone.
[5] Employment is as of the first of the calendar month.
[6] A downward revision of 6,000 to 37,000 in employment of the Post Office Department which affects data for October 1945–November 1946 has been taken into account in the data for "Other agencies."
[7] Revised.
[8] Starting December 1946, pay rolls cover the entire calendar month. Previously, pay rolls were for all pay periods ending within the calendar month, or for 4 weeks for months starting July 1945, except for December 1945, June and November 1946 when pay rolls included pay for 6 weeks for most employees.
[9] Subject to revision.
[10] Data not available.

TABLE 5.—*Personnel and pay of the military branch of the Federal Government in selected months*

[In thousands]

Branch, sex, or type of pay	January 1947 (preliminary)	December 1946 (preliminary)	November 1946 (revised)	January 1946	January 1942
	Personnel (in thousands)				
Total, personnel [1]	1,987	2,204	2,441	7,048	2,173
Army	1,319	1,511	1,717	4,229	1,687
Navy [2]	668	693	724	2,819	486
Men	1,961	2,176	2,412	6,883	2,165
Women	26	28	29	165	8
	Pay (in thousands)				
Total, pay	$694,581	$686,271	$744,112	$1,499,915	$162,715
Army	423,702	417,730	459,610	995,167	104,748
Navy [3]	270,879	268,541	284,502	504,748	57,967
Pay rolls [3]	319,207	326,341	360,125	861,673	162,715
Mustering-out pay [4]	27,736	43,712	47,506	486,390	----------
Family allowances [5]	29,298	32,195	35,312	151,852	----------
Leave payments [6]	318,340	284,023	301,169	----------	----------
Cash	22,958	16,468	19,610	----------	----------
Bonds	295,382	267,555	281,559	----------	----------

[1] Personnel is as of the first of the calendar month and includes those on terminal leave, the missing, and those in the hands of the enemy.

[2] Data cover the Navy, Marine Corps, and Coast Guard.

[3] Pay rolls are computed from personnel records. The personnel used in the computations is the count as of the last day of the month for the Army and the average for the month for the Navy. Pay rolls for the Navy (proper) include quarterly clothing allowances in January; in January 1947 these allowances amounted to $5,127,175.

[4] Although payments may extend over a period of three months, data for the Navy (proper) include the total amount in the month of discharge.

[5] Represents Government's contribution. The men's share is included in the pay roll.

[6] Leave payments were authorized by Public Law 704 of the 79th Congress to former enlisted personnel for accrued and unused leave and to present officers and enlisted personnel for leave accrued in excess of 60 days. Payment of present personnel while on terminal leave is included in the pay roll. Value of the bonds represents the face value; interest will be paid in addition to the face value at the time the bonds are cashed.

Military personnel and pay figures are reported monthly to the Bureau of Labor Statistics but are published here only quarterly.

Mimeographed tables giving civilian employment and military personnel and pay, monthly, 1939 to date, and civilian pay rolls, monthly, 1943 to date, are available upon request.

Detailed Reports for Industrial and Business Employment, December 1946

MONTHLY reports on employment and pay rolls are presented below for more than 150 manufacturing industries and for 27 nonmanufacturing industries including water transportation and class I steam railroads. Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and amount of pay rolls for the period ending nearest the 15th of the month.

TABLE 1.—*Estimated number of production workers in manufacturing industries* [1]

[In thousands]

Industry group and industry	December 1946	November 1946	October 1946	December 1945
All manufacturing	12,281	12,218	12,026	10,519
Durable goods	6,223	6,210	6,116	5,097
Nondurable goods	6,058	6,008	5,910	5,422
Durable goods				
Iron and steel and their products	1,462	1,476	1,442	1,294
Blast furnaces, steel works, and rolling mills	467.0	481.5	473.5	446.3
Gray-iron and semisteel castings	84.5	84.2	81.9	72.3
Malleable-iron castings	24.2	24.8	24.4	23.0
Steel castings	51.5	51.2	48.8	52.4
Cast-iron pipe and fittings	19.2	19.4	19.1	15.1
Tin cans and other tinware	41.5	41.3	42.2	37.1
Wire drawn from purchased rods	29.9	29.9	29.2	28.9
Wirework	40.5	40.9	41.3	33.0
Cutlery and edge tools	27.7	27.3	25.8	23.1
Tools (except edge tools, machine tools, files, and saws)	26.8	26.4	26.8	23.2
Hardware	49.6	49.5	48.3	36.8
Plumbers' supplies	29.8	29.3	23.5	20.0
Stoves, oil burners, and heating equipment not elsewhere classified	60.7	62.0	60.3	51.3
Steam and hot-water heating apparatus and steam fittings	51.0	51.4	50.2	43.9
Stamped and enameled ware and galvanizing	84.0	83.7	82.1	67.4
Fabricated structural and ornamental metalwork	57.1	56.9	55.1	44.0
Metal doors, sash, frames, molding, and trim	10.1	10.1	10.0	7.5
Bolts, nuts, washers, and rivets	21.2	21.0	20.6	20.8
Forgings, iron and steel	26.7	26.7	26.5	25.1
Wrought pipe, welded and heavy-riveted	13.2	13.8	13.1	14.5
Screw-machine products and wood screws	29.3	29.3	29.0	26.1
Steel barrels, kegs, and drums	6.1	6.3	6.3	6.2
Firearms	14.0	14.2	14.2	10.3
Electrical machinery	575	568	558	484
Electrical equipment	314.8	310.9	307.6	293.0
Radios and phonographs	93.3	91.5	88.5	62.8
Communication equipment	93.1	92.2	90.6	72.0
Machinery, except electrical	1,117	1,107	1,089	914
Machinery and machine-shop products	379.6	377.7	370.3	324.7
Engines and turbines	45.6	45.6	44.8	38.6
Tractors	54.5	53.7	53.7	51.5
Agricultural machinery, excluding tractors	44.8	43.5	42.3	40.3
Machine tools	60.0	59.7	62.0	53.3
Machine-tool accessories [2]	51.5	51.8	51.2	45.1
Textile machinery	35.5	34.7	33.9	27.9
Pumps and pumping equipment	58.9	58.3	57.4	52.5
Typewriters	22.3	22.2	21.3	14.3
Cash registers, adding and calculating machines	37.3	36.4	35.4	27.4
Washing machines, wringers and driers, domestic	12.5	12.6	12.0	9.6
Sewing machines, domestic and industrial	10.7	10.5	10.3	7.9
Refrigerators and refrigeration equipment	65.2	64.1	63.5	44.7
Transportation equipment, except automobiles	456	447	440	536
Locomotives	27.1	27.1	27.4	23.3
Cars, electric- and steam-railroad	50.6	50.5	48.5	45.7
Aircraft and parts, excluding aircraft engines	144.7	146.3	143.2	120.7
Aircraft engines	28.9	29.3	28.6	21.9
Shipbuilding and boatbuilding	142.8	133.8	133.9	264.7
Motorcycles, bicycles, and parts	12.1	11.7	11.5	8.1

See footnotes at end of table.

TABLE 1.—*Estimated number of production workers in manufacturing industries* [1]—Continued

[In thousands]

Industry group and industry	December 1946	November 1946	October 1946	December 1945
***Durable goods*—Continued**				
Automobiles	745	749	745	388
Nonferrous metals and their products	410	406	402	326
Smelting and refining, primary, of nonferrous metals	39.9	39.3	38.6	34.1
Alloying and rolling and drawing of nonferrous metals except aluminum	62.4	61.7	61.5	54.6
Clocks and watches	28.2	28.5	28.2	22.9
Jewelry (precious metals) and jewelers' findings	18.0	17.4	17.4	15.3
Silverware and plated ware	15.1	15.1	14.7	11.7
Lighting equipment	31.7	31.2	31.2	18.9
Aluminum manufactures	51.3	50.9	50.6	40.7
Sheet-metal work, not elsewhere classified	27.2	27.4	26.7	21.8
Lumber and timber basic products	639	645	636	499
Sawmills and logging camps	230.7	235.5	234.2	197.2
Planing and plywood mills	76.5	76.8	75.6	62.9
Furniture and finished lumber products	407	401	393	336
Mattresses and bedsprings	23.1	23.8	22.8	17.1
Furniture	171.5	169.1	166.7	143.4
Wooden boxes, other than cigar	25.9	25.9	25.5	23.6
Caskets and other morticians' goods	14.6	13.9	13.1	12.2
Wood preserving	12.7	12.4	12.5	11.4
Wood, turned and shaped	24.1	23.2	22.9	21.3
Stone, clay, and glass products	412	411	411	320
Glass and glassware	104.0	104.5	105.4	78.8
Glass products made from purchased glass	13.0	12.8	12.4	10.8
Cement	29.1	28.7	28.6	21.2
Brick, tile, and terra cotta	62.2	62.3	63.6	49.7
Pottery and related products	49.4	48.6	48.2	40.7
Gypsum	6.3	6.3	5.9	4.6
Wallboard, plaster (except gypsum), and mineral wool	11.1	11.0	10.8	9.8
Lime	8.9	9.0	9.0	7.9
Marble, granite, slate, and other products	17.3	17.2	17.2	13.8
Abrasives	20.1	20.0	19.8	16.3
Asbestos products	21.7	21.6	21.3	14.9
Nondurable goods				
Textile-mill products and other fiber manufactures	1,252	1,240	1,224	1,113
Cotton manufactures, except smallwares	468.8	465.3	459.5	423.8
Cotton smallwares	14.5	14.3	14.5	13.4
Silk and rayon goods	95.6	94.8	93.8	87.1
Woolen and worsted manufactures, except dyeing and finishing	164.4	162.2	160.5	147.5
Hosiery	118.5	117.5	115.8	104.3
Knitted cloth	10.9	11.2	11.2	10.7
Knitted outerwear and knitted gloves	31.7	31.5	30.8	28.7
Knitted underwear	36.0	35.6	35.2	33.7
Dyeing and finishing textiles, including woolen and worsted	65.0	64.8	64.1	59.2
Carpets and rugs, wool	26.4	25.7	25.0	19.6
Hats, fur-felt	11.9	11.7	11.5	10.1
Jute goods, except felts	3.7	3.6	3.8	3.7
Cordage and twine	15.4	15.2	15.4	14.6
Apparel and other finished textile products	1,099	1,083	1,085	938
Men's clothing, not elsewhere classified	205.5	204.3	199.6	177.4
Shirts, collars, and nightwear	57.8	56.8	54.8	50.7
Underwear and neckwear, men's	12.9	12.8	12.8	11.5
Work shirts	13.8	13.5	13.4	13.0
Women's clothing, not elsewhere classified	211.2	208.9	216.9	203.9
Corsets and allied garments	16.9	16.6	16.3	14.9
Millinery	17.8	16.5	19.0	18.2
Handkerchiefs	2.5	2.4	2.4	2.4
Curtains, draperies, and bedspreads	12.8	14.5	15.0	11.5
Housefurnishings, other than curtains, etc	10.5	10.4	11.2	9.1
Textile bags	14.8	14.4	14.1	14.7
Leather and leather products	360	354	352	330
Leather	42.9	41.1	41.6	42.4
Boot and shoe cut stock and findings	18.1	18.2	17.8	16.8
Boots and shoes	194.8	192.2	190.4	177.8
Leather gloves and mittens	10.6	10.9	11.0	11.4
Trunks and suitcases	14.5	14.5	14.7	12.2

See footnotes at end of table.

TABLE 1.—*Estimated number of production workers in manufacturing industries*[1]—Continued

[In thousands]

Industry group and industry	December 1946	November 1946	October 1946	December 1945
Nondurable goods—Continued				
Food	1,121	1,123	1,074	1,078
Slaughtering and meat packing	150.7	138.9	84.4	147.7
Butter	23.5	24.4	24.9	21.7
Condensed and evaporated milk	12.9	13.1	13.7	12.9
Ice cream	16.4	16.8	17.6	15.2
Flour	30.7	30.9	30.6	30.9
Feeds, prepared	21.2	21.8	21.7	23.3
Cereal preparations	10.8	11.0	10.8	10.0
Baking	252.7	249.0	241.3	253.2
Sugar refining, cane	14.7	12.5	11.5	12.9
Sugar, beet	16.1	22.0	19.5	18.0
Confectionery	58.6	57.1	55.8	55.2
Beverages, nonalcoholic	23.1	23.2	23.0	23.5
Malt liquors	53.7	53.3	53.0	53.4
Canning and preserving	115.3	131.9	173.3	107.4
Tobacco manufactures	92	91	89	82
Cigarettes	34.5	34.5	33.9	33.0
Cigars	42.9	42.3	41.4	35.0
Tobacco (chewing and smoking) and snuff	7.8	8.0	7.8	8.5
Paper and allied products	383	379	372	335
Paper and pulp	170.9	169.7	167.7	153.1
Paper goods, other	48.1	48.2	47.2	44.2
Envelopes	11.0	10.9	10.5	9.8
Paper bags	15.8	15.4	15.1	13.4
Paper boxes	92.7	91.7	89.6	81.6
Printing, publishing, and allied industries	403	399	394	355
Newspapers and periodicals	136.7	135.0	133.9	121.9
Printing, book and job	166.3	165.0	163.2	146.0
Lithographing	30.5	30.3	29.9	26.9
Bookbinding	34.1	33.6	33.0	28.7
Chemicals and allied products	504	501	491	488
Paints, varnishes, and colors	36.4	35.9	36.0	32.3
Drugs, medicines, and insecticides	53.8	53.5	53.1	48.7
Perfumes and cosmetics	11.6	12.4	12.6	12.2
Soap	14.3	13.8	13.7	13.6
Rayon and allied products	58.6	58.9	57.8	57.7
Chemicals, not elsewhere classified	122.9	120.5	118.1	112.8
Explosives and safety fuses	12.9	12.7	12.9	21.5
Compressed and liquefied gases	5.7	5.8	5.3	5.5
Ammunition, small-arms	6.6	6.8	6.9	9.9
Fireworks	3.5	3.5	3.4	2.3
Cottonseed oil	19.0	20.5	17.5	19.4
Fertilizers	23.1	22.1	22.0	22.6
Products of petroleum and coal	150	151	151	140
Petroleum refining	99.4	99.1	99.2	93.1
Coke and byproducts	25.2	25.9	25.8	23.1
Paving materials	1.7	1.8	2.0	1.6
Roofing materials	12.5	12.7	12.6	10.1
Rubber products	248	245	240	203
Rubber tires and inner tubes	112.1	112.0	110.4	96.2
Rubber boots and shoes	19.7	19.2	18.4	15.9
Rubber goods, other	77.0	76.2	74.8	64.4
Miscellaneous industries	446	442	438	360
Instruments (professional and scientific), and fire control equipment	20.4	19.4	20.6	22.4
Photographic apparatus	25.4	25.4	25.3	22.4
Optical instruments and ophthalmic goods	21.9	21.6	21.5	19.9
Pianos, organs, and parts	9.6	9.9	9.7	6.1
Games, toys, and dolls	24.1	25.2	24.3	17.5
Buttons	10.5	10.2	10.6	9.4
Fire extinguishers	2.2	2.1	2.1	2.4

[1] December 1946 estimates are based on reports from 32,800 cooperating establishments covering 7,335,000 production workers. Estimates for the major industry groups have been adjusted to levels indicated by final 1944 data made available by the Bureau of Employment Security of the Federal Security Agency. Estimates for individual industries have been adjusted to levels indicated by the 1939 Census of Manufactures but not to Federal Security Agency data. For this reason, together with the fact that this Bureau has not prepared estimates for certain industries, the sum of the individual industry estimates will not agree with the totals shown for the major industry groups.

[2] Revisions have been made as follows in the data for earlier months:
Machine-tool accessories.—October 1945 through September 1946 to 44.7, 43.9, 45.1, 45.7, 45.5, 45.9, 46.1, 45.9, 47.4, 47.5, 49.1, and 50.6, respectively.

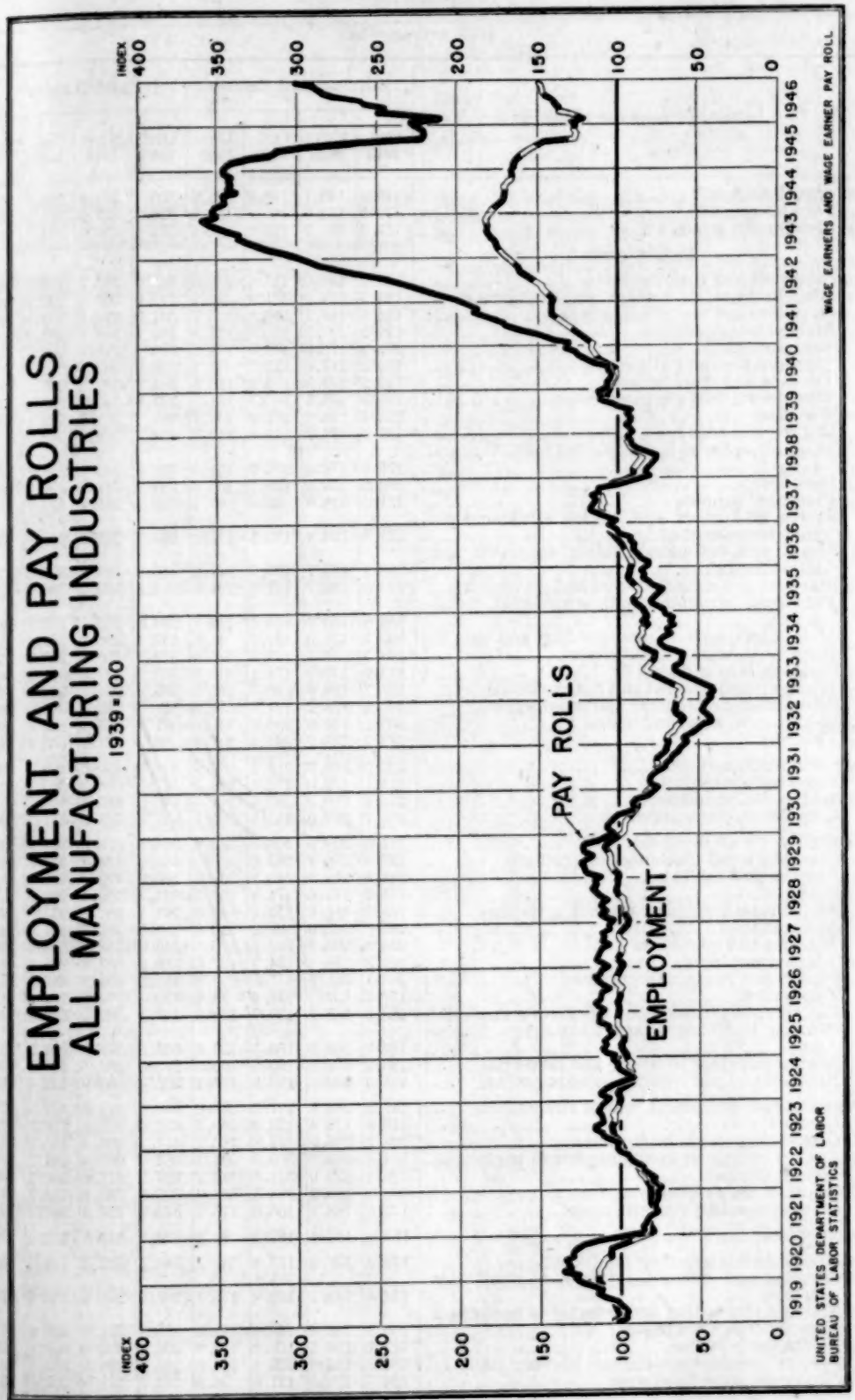
EMPLOYMENT AND PAY ROLLS
ALL MANUFACTURING INDUSTRIES
1939=100
INDEX
400
350
300
250
200
150
100
50
0
PAY ROLLS
EMPLOYMENT
1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
WAGE EARNERS AND WAGE EARNER PAY ROLL

TABLE 2.—*Indexes of production-worker employment and pay rolls in manufacturing industries* [1]

[1939 average=100]

Industry group and industry	Employment indexes				Pay-roll indexes			
	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1945	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1945
All manufacturing	149.9	149.1	146.8	128.4	300.1	291.8	286.4	226.2
Durable goods	172.3	172.0	169.4	141.2	328.3	321.6	318.5	240.0
Nondurable goods	132.2	131.2	129.0	118.4	272.4	262.6	255.1	212.7
Durable goods								
Iron and steel and their products	147.4	148.9	145.5	130.5	265.5	263.2	270.0	220.5
Blast furnaces, steel works, and rolling mills	120.2	124.0	121.9	114.9	193.9	208.7	203.2	181.2
Gray-iron and semisteel castings	144.6	144.1	140.2	123.7	307.0	298.7	294.0	240.5
Malleable-iron castings	134.3	137.5	135.5	127.3	286.1	294.4	292.5	259.3
Steel castings	171.3	170.3	162.0	174.2	315.4	315.5	291.0	296.8
Cast-iron pipe and fittings	116.2	117.6	115.7	91.2	259.9	262.4	253.5	176.4
Tin cans and other tinware	130.5	129.9	132.9	116.8	244.5	232.6	248.8	202.3
Wire drawn from purchased rods	135.9	136.3	132.7	131.7	239.6	240.7	231.3	199.7
Wirework	133.4	134.6	135.9	108.7	261.7	261.7	265.1	200.0
Cutlery and edge tools	179.8	177.3	167.4	149.7	404.7	389.9	368.9	301.7
Tools (except edge tools, machine tools, files, and saws)	175.0	172.4	174.9	151.5	360.8	348.8	355.8	272.5
Hardware	139.0	139.0	135.5	103.3	286.2	281.5	278.3	195.5
Plumbers' supplies	121.0	118.9	95.4	81.1	225.1	215.4	173.2	136.6
Stoves, oil burners, and heating equipment not elsewhere classified	131.6	134.4	130.8	111.2	263.3	265.0	258.9	197.7
Steam and hot-water heating apparatus and steam fittings	168.1	169.7	165.7	145.0	310.2	328.4	325.5	253.9
Stamped and enameled ware and galvanizing	151.3	150.7	147.7	121.3	316.8	303.2	300.7	222.4
Fabricated structural and ornamental metalwork	160.8	160.3	155.2	123.8	293.0	275.3	273.9	196.0
Metal doors, sash, frames, molding, and trim	130.2	131.0	129.2	96.8	257.4	250.2	247.9	165.2
Bolts, nuts, washers, and rivets	148.3	147.1	143.8	145.2	272.9	270.3	253.9	266.4
Forgings, iron and steel [2]	173.9	173.9	172.1	163.5	333.2	323.6	318.6	285.6
Wrought pipe, welded and heavy-riveted	157.7	164.9	156.3	173.3	285.2	294.7	261.9	280.1
Screw-machine products and wood screws	173.0	173.2	171.6	154.0	351.3	349.6	349.0	284.4
Steel barrels, kegs, and drums	100.1	103.8	104.0	101.9	231.9	237.2	223.0	183.1
Firearms	279.7	283.2	284.3	206.8	569.3	571.2	553.2	380.8
Electrical machinery	222.0	219.2	215.2	186.9	414.3	400.6	393.1	308.5
Electrical equipment	174.1	172.0	170.1	162.1	317.0	308.3	303.7	261.6
Radios and phonographs	214.4	210.2	203.4	144.4	448.9	427.3	408.5	258.1
Communication equipment	289.7	287.0	282.0	224.1	537.6	521.3	521.5	369.5
Machinery, except electrical	211.3	209.5	206.0	172.9	384.8	375.5	373.5	288.7
Machinery and machine-shop products	187.6	186.7	183.0	160.5	346.7	336.8	333.5	265.4
Engines and turbines	244.5	244.5	240.1	207.2	500.8	492.4	481.7	364.1
Tractors	174.2	171.6	171.8	164.6	271.3	269.9	269.0	235.3
Agricultural machinery excluding tractors	161.0	156.3	152.1	145.0	291.1	280.7	277.2	249.4
Machine tools	163.8	162.9	169.2	145.6	287.8	282.7	291.9	244.5
Machine-tool accessories [3]	204.6	205.9	203.6	179.1	349.9	343.4	343.3	279.2
Textile machinery	161.8	158.5	154.7	127.5	315.8	301.1	298.3	241.2
Pumps and pumping equipment	243.1	240.6	237.0	216.8	467.8	451.1	452.8	406.3
Typewriters	137.2	137.2	131.6	88.1	270.1	279.0	261.6	163.9
Cash registers, adding and calculating machines	189.3	185.2	179.9	139.3	347.2	352.0	336.0	239.2
Washing machines, wringers and driers, domestic	167.2	169.0	160.3	128.3	303.5	292.5	301.2	207.1
Sewing machines, domestic and industrial	136.2	133.6	130.8	100.3	273.0	260.5	255.0	180.6
Refrigerators and refrigeration equipment	185.5	182.2	180.6	127.1	305.4	300.9	311.4	198.2
Transportation equipment, except automobiles	287.2	281.6	277.2	338.0	550.0	511.5	522.4	577.2
Locomotives	418.8	419.4	423.6	360.3	876.0	836.8	895.6	772.9
Cars, electric- and steam-railroad	206.2	206.0	197.6	186.2	411.2	409.4	386.2	314.8
Aircraft and parts, excluding aircraft engines	364.8	368.8	360.9	304.1	683.3	680.4	681.3	520.4
Aircraft engines	325.4	329.0	321.8	246.2	527.2	477.6	530.2	346.3
Shipbuilding and boatbuilding	206.2	193.2	193.3	382.3	397.6	336.8	353.7	641.2
Motorcycles, bicycles, and parts	173.6	168.1	165.0	116.2	346.7	318.4	317.5	195.9
Automobiles	185.1	186.1	185.2	96.4	324.5	315.8	312.3	135.5
Nonferrous metals and their products	178.9	177.2	175.4	142.2	344.1	332.5	326.3	250.4
Smelting and refining, primary, of nonferrous metals	144.4	142.1	139.9	123.5	269.2	256.8	250.6	213.3
Alloying and rolling and drawing of nonferrous metals except aluminum	160.8	158.8	158.4	140.6	305.3	291.4	286.6	247.0
Clocks and watches	139.1	140.5	138.8	112.9	306.3	309.6	301.6	211.6
Jewelry (precious metals) and jewelers' findings	124.5	120.4	120.8	106.0	248.0	228.8	235.5	195.6
Silverware and plated ware	124.7	124.3	121.6	96.8	273.2	258.9	257.5	192.3
Lighting equipment	154.8	152.5	152.3	92.4	272.7	271.2	264.6	139.0
Aluminum manufactures	217.7	216.3	214.9	172.6	384.5	373.7	382.0	266.7
Sheet-metal work, not elsewhere classified	145.1	146.2	142.2	116.2	286.4	281.8	280.8	215.0

See footnotes at end of table.

TABLE 2.—*Indexes of production-worker employment and pay rolls in manufacturing industries* [1]—Continued

Industry group and industry	Employment indexes				Pay-roll indexes			
	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1945	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1945
Durable goods—Continued								
Lumber and timber basic products	151.9	153.5	151.2	118.6	312.4	306.9	314.5	199.4
Sawmills and logging camps	80.1	81.8	81.3	68.5	162.8	163.5	169.6	114.1
Planing and plywood mills	105.3	105.7	104.1	86.6	215.4	204.7	208.1	144.8
Furniture and finished lumber products	123.9	122.1	119.8	102.6	266.9	256.8	252.7	188.1
Mattresses and bedsprings	125.9	129.8	124.3	93.4	259.0	258.6	251.8	161.7
Furniture	107.8	106.2	104.7	90.1	230.7	223.0	220.3	164.3
Wooden boxes, other than cigar	102.2	102.0	100.6	93.2	234.6	223.8	225.7	188.8
Caskets and other morticians' goods	117.1	112.0	105.6	97.8	225.8	206.7	193.0	164.7
Wood preserving	112.6	110.7	111.4	101.4	278.1	267.8	265.8	211.0
Wood, turned and shaped	109.6	105.6	104.2	96.6	237.0	222.4	219.1	178.2
Stone, clay, and glass products	140.5	140.0	139.9	109.1	274.0	267.4	264.0	181.7
Glass and glassware	149.0	149.7	150.9	112.9	284.6	278.5	274.2	182.1
Glass products made from purchased glass	129.6	127.8	123.7	108.0	264.2	253.2	239.6	180.8
Cement	122.2	120.6	120.2	89.0	209.3	206.7	205.4	136.1
Brick, tile, and terra cotta	109.6	109.7	112.1	87.5	225.2	222.3	228.0	147.5
Pottery and related products	149.1	146.8	145.5	123.0	274.4	262.5	262.0	195.3
Gypsum	127.3	126.7	119.6	93.8	244.3	240.7	232.1	158.4
Wallboard, plaster (except gypsum), and mineral wool	137.1	135.6	133.0	121.1	301.6	289.7	281.7	228.3
Lime	93.6	95.2	94.7	83.7	219.7	221.4	218.3	171.8
Marble, granite, slate, and other products	93.6	93.2	92.8	74.5	158.0	151.5	155.8	113.6
Abrasives	260.0	259.0	256.2	211.2	459.9	440.8	407.8	337.8
Asbestos products	136.4	136.0	134.1	93.6	300.0	293.4	287.5	181.3
Nondurable goods								
Textile-mill products and other fiber manufactures	109.4	108.4	107.0	97.3	255.7	247.9	242.9	188.0
Cotton manufactures, except smallwares	118.4	117.5	116.0	107.0	301.2	293.5	285.4	216.2
Cotton smallwares	109.0	107.5	108.8	100.3	231.9	220.6	228.7	191.5
Silk and rayon goods	79.8	79.1	78.3	72.7	197.9	191.4	189.3	148.8
Woolen and worsted manufactures, except dyeing and finishing	110.2	108.7	107.5	98.8	253.0	242.7	243.7	200.0
Hosiery	74.5	73.9	72.8	65.6	158.2	154.5	150.4	113.1
Knitted cloth	99.6	102.9	102.3	97.8	207.1	217.4	217.1	186.7
Knitted outerwear and knitted gloves	112.7	112.0	109.6	101.9	250.4	252.2	243.9	197.7
Knitted underwear	93.4	92.4	91.3	87.6	216.1	207.9	203.9	166.1
Dyeing and finishing textiles including woolen and worsted	97.2	96.9	95.9	88.6	210.4	201.6	195.2	163.9
Carpets and rugs, wool	103.1	100.3	97.9	76.6	214.3	204.0	196.2	132.5
Hats, fur-felt	81.9	80.6	79.1	69.7	192.0	185.2	182.0	147.4
Jute goods, except felts	102.3	101.2	106.4	103.7	236.4	228.6	239.4	206.2
Cordage and twine	127.2	125.8	127.2	120.5	278.4	268.0	268.5	228.4
Apparel and other finished textile products	139.2	137.2	137.4	118.9	298.3	288.5	288.9	215.0
Men's clothing, not elsewhere classified	94.0	93.4	91.3	81.1	210.7	206.7	189.4	140.7
Shirts, collars, and nightwear	82.0	80.6	77.8	72.0	198.1	188.3	172.7	133.5
Underwear and neckwear, men's	79.8	79.0	79.0	71.2	203.3	205.8	197.4	154.4
Work shirts	102.2	100.7	99.5	96.5	254.1	242.6	221.3	172.7
Women's clothing, not elsewhere classified	77.7	76.9	79.9	75.1	159.1	154.2	170.5	140.9
Corsets and allied garments	90.0	88.3	86.8	79.4	185.9	182.1	177.1	140.4
Millinery	73.3	67.8	78.4	74.8	116.7	100.4	138.7	118.6
Handkerchiefs	51.5	50.6	48.6	49.1	124.7	118.8	108.8	92.4
Curtains, draperies, and bedspreads	75.9	86.0	88.8	68.1	164.9	190.5	196.2	137.1
Housefurnishings, other than curtains, etc	98.6	98.0	105.1	85.5	207.1	207.0	200.2	150.1
Textile bags [2]	123.5	120.1	117.3	122.3	242.7	226.9	219.7	206.4
Leather and leather products	103.6	102.1	101.5	95.2	216.8	200.1	198.1	179.2
Leather	90.7	87.0	88.1	89.7	174.5	160.8	158.7	161.6
Boot and shoe cut stock and findings	95.8	96.5	94.6	89.0	178.4	170.9	170.0	154.6
Boots and shoes	89.3	88.2	87.3	81.6	194.7	177.6	175.4	157.1
Leather gloves and mittens	106.0	108.6	109.8	113.9	201.9	211.9	219.6	202.1
Trunks and suitcases	173.9	174.6	176.6	146.4	348.4	341.6	346.1	263.7
Food	131.2	131.4	125.7	126.2	259.2	248.1	228.6	220.4
Slaughtering and meat packing	125.0	115.3	70.0	122.6	236.9	215.7	110.5	214.9
Butter	130.6	136.1	138.5	121.1	246.6	243.4	256.1	197.6
Condensed and evaporated milk	132.5	135.4	140.7	132.8	256.2	253.7	264.9	215.9
Ice cream	104.4	107.2	111.9	96.7	185.5	183.2	194.9	148.8
Flour	123.9	124.8	123.5	124.9	267.8	256.1	256.4	221.3
Feeds, prepared	137.6	141.5	140.7	151.3	266.9	273.5	268.2	261.6

See footnotes at end of table.

TABLE 2.—*Indexes of production-worker employment and pay rolls in manufacturing industries* [1]—Continued

Industry group and industry	Employment indexes				Pay-roll indexes			
	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1945	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1945
Nondurable goods—Continued								
Food—Continued								
Cereal preparations	145.0	147.0	145.1	133.8	271.9	271.6	274.7	230.3
Baking	109.6	107.9	104.6	109.8	209.0	199.0	190.8	181.2
Sugar refining, cane	103.5	88.4	81.4	91.4	194.4	142.8	125.5	140.1
Sugar, beet	154.8	211.1	187.0	173.3	341.8	426.2	310.1	279.7
Confectionery	117.9	114.9	112.1	116.9	240.5	226.9	212.1	201.6
Beverages, nonalcoholic	108.5	109.2	108.3	110.7	169.1	163.7	161.6	150.4
Malt liquors	148.7	147.6	146.7	148.0	251.2	236.9	235.4	227.1
Canning and preserving	85.7	98.1	128.9	79.8	199.9	212.9	324.7	167.3
Tobacco manufactures	98.3	97.6	95.8	87.8	222.0	212.7	207.4	164.1
Cigarettes	125.9	125.7	123.7	120.4	254.7	247.1	238.9	184.8
Cigars	84.3	83.0	81.4	68.8	206.7	194.3	191.7	148.8
Tobacco (chewing and smoking) and snuff	85.4	87.0	85.6	92.5	166.8	166.7	160.0	155.8
Paper and allied products	144.3	142.9	140.2	126.3	281.7	273.9	265.8	219.0
Paper and pulp	124.3	123.5	122.0	111.4	244.8	240.2	234.9	196.6
Paper goods, other	127.7	127.9	125.5	117.6	249.7	240.7	233.5	198.1
Envelopes	126.7	125.0	121.3	112.3	235.4	229.3	212.9	178.8
Paper bags [2]	142.4	139.1	136.4	121.2	283.5	268.6	264.8	218.3
Paper boxes	134.0	132.6	129.5	118.0	261.4	253.6	245.0	203.1
Printing, publishing, and allied industries	122.8	121.6	120.1	108.1	214.9	205.5	200.3	163.2
Newspapers and periodicals	115.2	113.7	112.8	102.7	189.7	182.0	178.9	141.9
Printing, book and job	131.6	130.6	129.2	115.5	239.4	227.9	220.8	184.7
Lithographing	117.3	116.5	115.1	103.4	203.4	196.1	191.4	161.6
Bookbinding	132.3	130.5	128.0	111.2	283.6	269.1	262.1	212.1
Chemicals and allied products	174.9	173.7	170.5	160.2	322.1	311.8	303.5	283.4
Paints, varnishes, and colors	129.2	127.7	127.9	114.8	214.7	208.2	204.8	178.1
Drugs, medicines, and insecticides	196.4	195.4	193.8	177.8	351.3	341.9	331.9	276.2
Perfumes and cosmetics	111.8	120.0	121.8	118.1	202.4	215.5	212.7	183.0
Soap	105.5	101.3	100.8	100.1	195.7	170.8	169.0	168.9
Rayon and allied products	121.3	121.9	119.8	119.6	216.3	215.2	209.8	193.8
Chemicals, not elsewhere classified	176.7	173.3	169.8	162.2	313.4	301.3	294.0	267.0
Explosives and safety fuses	178.0	174.6	178.2	296.6	299.2	282.7	292.4	469.7
Compressed and liquefied gases	144.0	146.0	133.6	140.0	243.2	242.5	220.0	225.6
Ammunition, small-arms	155.8	159.8	160.9	233.2	326.7	332.3	326.2	436.5
Fireworks	298.7	305.9	290.2	198.8	788.6	824.6	778.4	496.2
Cottonseed oil	124.8	134.7	115.3	128.0	328.7	341.3	277.7	279.6
Fertilizers	122.8	117.7	117.1	120.4	304.9	276.6	280.4	257.9
Products of petroleum and coal	142.1	142.6	142.8	132.3	246.6	245.7	245.8	222.2
Petroleum refining	136.4	136.0	136.2	130.6	233.2	226.9	228.2	212.6
Coke and byproducts	116.0	119.3	118.9	106.5	197.4	217.9	215.8	190.0
Paving materials	69.5	72.4	82.6	64.5	132.9	135.2	150.5	128.1
Roofing materials	155.8	157.2	157.1	125.7	309.8	313.8	303.5	228.9
Rubber products	204.7	202.9	198.7	168.2	402.3	385.1	368.5	275.5
Rubber tires and inner tubes	207.2	207.0	204.0	177.8	371.5	360.3	346.1	256.7
Rubber boots and shoes	132.7	129.6	123.9	107.1	272.6	253.7	214.8	194.5
Rubber goods, other	148.7	147.1	144.5	124.4	308.6	292.4	288.5	225.1
Miscellaneous industries	182.1	180.8	178.9	147.3	361.2	351.8	348.4	266.7
Instruments (professional and scientific), and fire-control equipment	184.3	175.9	186.4	202.8	334.6	310.7	331.5	332.1
Photographic apparatus	146.8	146.8	146.8	129.9	253.1	253.4	246.6	204.3
Optical instruments and ophthalmic goods	188.5	185.7	185.4	171.1	346.3	337.1	332.8	290.6
Pianos, organs, and parts	125.6	130.4	127.0	80.2	252.4	273.0	250.5	138.3
Games, toys, and dolls	128.9	135.2	130.4	94.0	271.6	289.7	275.4	172.6
Buttons	95.5	93.0	96.4	85.7	215.7	211.3	211.0	173.2
Fire extinguishers	219.6	213.3	208.2	238.9	438.8	431.9	415.8	491.5

[1] These indexes are based on reports from 32,800 cooperating establishments covering 7,335,000 full- and part-time production workers who worked or received pay during any part of one pay period ending nearest the 15th of December 1946. Indexes for the major industry groups have been adjusted to levels indicated by final 1944 data made available by the Bureau of Employment Security of the Federal Security Agency.

[2] Revisions have been made as follows in the indexes for earlier months:

Forgings, iron and steel.—September 1946 pay roll to 306.1.

Machine-tool accessories.—October 1945 through September 1946 employment to 177.5, 174.4, 179.1, 181.8, 180.7, 182.3, 183.1, 182.6., 188.5, 188.7, 195.3, and 201.0 respectively. August through November 1945 pay roll to 336.1, 274.2, 267.3, and 263.4; February through June 1946 to 279.4, 291.1, 288.4, 291.6, and 304.8.

Textile bags.—September 1946 pay roll to 207.2.

Paper bags.—September 1946 pay roll to 252.6.

TABLE 3.—*Estimated number of employees in selected nonmanufacturing industries* [1]

Industry group and industry	Estimated number of employees (in thousands)			
	December 1946	November 1946	October 1946	December 1945
Mining: [2]				
Anthracite	69.1	68.7	68.9	65.4
Bituminous coal	326	334	334	333
Metal	76.2	75.2	74.1	66.3
Iron	26.5	27.4	27.8	23.7
Copper	23.5	22.5	21.8	19.7
Lead and zinc	16.1	15.5	15.0	14.2
Gold and silver	7.7	7.4	7.2	6.5
Miscellaneous	2.4	2.4	2.3	2.2
Telephone	586	583	577	454
Telegraph [3]	40.4	40.9	41.5	47.6
Electric light and power	252	250	249	222
Street railways and busses	252	253	252	238
Hotels (year-round)	384	388	389	379
Power laundries	(4)	(4)	(4)	(4)
Cleaning and dyeing	(4)	(4)	(4)	(4)
Class I steam railroads [5]	1,353	1,382	1,376	1,397
Water transportation [6]	(7)	(7)	104	166

[1] See footnote 1, table 4.
[2] Data are for production workers only.
[3] Excludes messengers, and approximately 6,000 employees of general and divisional headquarters and of cable companies.
[4] The change in definition from "wage earner" to "production worker" in the power laundries and cleaning and dyeing industries results in the omission of driver-salesmen. This causes a significant difference in the data. New series are being prepared.
[5] Source: Interstate Commerce Commission.
[6] Based on estimates prepared by the U. S. Maritime Commission covering employment on active deep-sea American-flag steam and motor merchant vessels of 1,000 gross tons and over. Excludes employment on vessels under bareboat charter to, or owned by the Army or Navy. Beginning with October 1946, data relate to the end of the preceding month.
[7] Not available.

TABLE 4.—*Indexes of employment and pay rolls in selected nonmanufacturing industries* [1]

[1939 average = 100]

Industry group and industry	Employment indexes				Pay-roll indexes			
	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1945	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1945
Mining:								
Anthracite	83.5	82.9	83.2	79.0	212.3	182.3	199.9	167.1
Bituminous coal	88.1	90.0	90.1	89.8	258.3	233.1	237.1	222.0
Metal	86.4	85.2	83.9	75.2	159.3	146.9	148.0	117.6
Iron	132.4	136.1	138.7	117.6	239.7	238.6	252.4	178.2
Copper	98.4	94.6	91.2	82.5	192.7	170.0	167.1	135.4
Lead and zinc	103.4	99.4	96.3	91.5	220.1	192.1	188.5	173.5
Gold and silver	31.0	29.7	28.9	26.2	49.7	44.2	43.0	34.4
Miscellaneous	59.6	60.9	59.2	55.0	93.3	99.9	99.9	82.8
Quarrying and nonmetallic	99.5	101.2	101.7	83.8	221.3	222.4	227.6	155.0
Crude petroleum production [2]	92.6	93.0	93.4	88.4	151.9	155.3	150.1	135.9
Public utilities:								
Telephones	184.6	183.4	181.6	143.0	264.5	273.0	269.2	203.5
Telegraph	107.4	108.7	110.3	126.4	190.5	194.2	201.7	178.8
Electric light and power	103.0	102.5	102.0	90.7	161.6	157.6	155.3	129.8
Street railways and busses	130.1	130.6	130.3	122.7	213.6	210.9	212.6	184.0
Wholesale trade	114.4	112.7	110.7	104.1	197.2	189.7	184.5	159.2

See footnotes at end of table.

TABLE 4.—*Indexes of employment and pay rolls in selected nonmanufacturing industries* [1]—Continued

[1939 average=100]

Industry group and industry	Employment indexes				Pay-roll indexes			
	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1945	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1945
Retail trade	126.5	117.2	112.2	116.0	211.1	191.5	182.5	167.6
Food	111.8	108.6	103.7	108.0	194.6	185.6	174.6	159.5
General merchandise	171.1	144.8	132.4	152.5	272.4	225.0	204.8	209.2
Apparel	135.7	124.3	120.1	129.1	230.6	207.9	201.5	194.0
Furniture and housefurnishings	90.4	85.5	83.1	75.1	165.7	148.6	139.8	114.3
Automotives	100.2	98.4	96.6	84.5	178.8	169.3	166.0	134.8
Lumber and building materials	116.1	115.2	113.6	102.0	200.5	191.9	190.9	156.7
Hotels (year-round) [2]	119.1	120.2	120.6	117.6	218.8	218.5	214.5	196.1
Power laundries	110.9	109.9	110.1	107.8	201.0	191.5	189.8	174.3
Cleaning and dyeing	120.9	123.0	126.1	119.9	219.5	217.0	225.7	196.9
Class I steam railroads [4]	137.0	139.9	139.3	141.4	[5]	[5]	[5]	[5]
Water transportation [6]	[5]	[5]	199.2	315.7	[5]	[5]	422.6	583.1

[1] These figures are based on reports from cooperating establishments covering both full- and part-time employees who worked or received pay during any part of one pay period ending nearest the 15th of December 1946, as follows:

Mining.—2,800 establishments, 384,000 production workers.
Public utilities.—2,800 establishments, 780,000 employees.
Wholesale trade.—11,100 establishments, 311,000 employees.
Retail trade.—36,700 establishments, 1,194,000 employees.
Hotels (year-round).—1,300 establishments, 134,000 employees.
Power laundries and cleaning and dyeing.—1,500 establishments, 71,000 production workers.

[2] Does not include well drilling or rig building. September 1946 pay roll revised to 149.5.
[3] Cash payments only; additional value of board, room, and tips, not included.
[4] Source: Interstate Commerce Commission.
[5] Not available.
[6] Based on estimates prepared by the U. S. Maritime Commission covering employment on active deep-sea American-flag steam and motor merchant vessels of 1,000 gross tons and over. Excludes employment on vessels under bareboat charter to, or owned by the Army or Navy. Beginning with October 1946, data relate to the end of the preceding month.

Labor Turn-Over[1] in Manufacturing, Mining, and Public Utilities, December 1946

THE DECEMBER 1946 HIRING RATE for factory workers dropped to 41 per 1,000, reflecting the usual seasonal lull aggravated further by the freight embargo occasioned by the coal strike. Manufacturers generally met the material shortages by the curtailment of hiring rather than by large lay-offs.

Moderate increases in lay-offs were, however, noted in six of the durable and seven of the nondurable goods groups. In the lumber and food industries seasonal factors more than doubled the lay-off rates. The freight embargo, prohibiting the movement of certain nonessential materials, was responsible for increased lay-offs in the iron and steel and in the electrical and nonelectrical machinery industries.

[1] Turn-over rates reflect conditions only in plants which were in operation, and should be used with caution because of the elimination from the over-all samples of plants involved in work stoppages.

Despite declines in the quit rates for the third consecutive month in all major manufacturing groups, the December quit rate of 29 per 1,000 for manufacturing as a whole was more than 4 times that of December 1939. The current relatively high quit rate is characteristic of periods of high employment levels.

Women quit their jobs at a higher rate than men in all but 2 of the 19 major groups. However, accessions for women exceeded those for men in 8 of the nondurable-goods groups and in 3 of the durable-goods groups (electrical machinery; machinery, other than electrical, and automobiles). For all manufacturing industries combined, the hiring rate for women was the same as that for men.

TABLE 1.—*Monthly labor turn-over rates (per 100 employees) in manufacturing industries*[1]

Class of turn-over and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total separation:												
1946	6.8	6.3	6.6	6.3	6.3	5.7	5.8	6.6	6.9	6.3	4.9	[2] 4.3
1945	6.2	6.0	6.8	6.6	7.0	7.9	7.7	17.9	12.0	8.6	7.1	5.9
1943	7.1	7.1	7.7	7.5	6.7	7.1	7.6	8.3	8.1	7.0	6.4	6.6
1939	3.2	2.6	3.1	3.5	3.5	3.3	3.3	3.0	2.8	2.9	3.0	3.5
Quit:												
1946	4.3	3.9	4.2	4.3	4.2	4.0	4.6	5.3	5.3	4.7	3.7	[2] 2.9
1945	4.6	4.3	5.0	4.8	4.8	5.1	5.2	6.2	6.7	5.6	4.7	4.0
1943	4.5	4.7	5.4	5.4	4.8	5.2	5.6	6.3	6.3	5.2	4.5	4.4
1939	.9	.6	.8	.8	.7	.7	.7	.8	1.1	.9	.8	.7
Discharge:												
1946	.5	.5	.4	.4	.4	.3	.4	.4	.4	.4	.4	[2] .4
1945	.7	.7	.7	.6	.6	.7	.6	.7	.6	.5	.5	.4
1943	.5	.5	.6	.5	.6	.6	.7	.7	.6	.6	.6	.6
1939	.1	.1	.1	.1	.1	.1	.1	.1	.1	.2	.2	.1
Lay-off: [3]												
1946	1.8	1.7	1.8	1.4	1.5	1.2	.6	.7	1.0	1.0	.7	[2] .9
1945	.6	.7	.7	.8	1.2	1.7	1.5	10.7	4.5	2.3	1.7	1.3
1943	.7	.5	.5	.6	.5	.5	.5	.5	.5	.5	.7	1.0
1939	2.2	1.9	2.2	2.6	2.7	2.5	2.5	2.1	1.6	1.8	2.0	2.7
Military and miscellaneous: [4]												
1946	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.1	[2] .1
1945	.3	.3	.4	.4	.4	.4	.4	.3	.2	.2	.2	.2
1943	1.4	1.4	1.2	1.0	.8	.8	.8	.8	.7	.7	.6	.6
Accession:												
1946	8.5	6.8	7.1	6.7	6.1	6.7	7.4	7.0	7.1	6.8	5.7	[2] 4.1
1945	7.0	5.0	4.9	4.7	5.0	5.9	5.8	5.9	7.4	8.6	8.7	6.9
1943	8.3	7.9	8.3	7.4	7.2	8.4	7.8	7.6	7.7	7.2	6.6	5.2
1939	4.1	3.1	3.3	2.9	3.3	3.9	4.2	5.1	6.2	5.9	4.1	2.8

[1] Month-to-month employment changes as indicated by labor turn-over rates are not precisely comparable to those shown by the Bureau's employment and pay-roll reports, as the former are based on data for the entire month while the latter refer, for the most part, to a one-week period ending nearest the middle of the month. In addition, labor turn-over data, beginning in January 1943, refer to all employees, whereas the employment and pay-roll reports relate only to production workers. The turn-over sample is not so extensive as that of the employment and pay-roll survey—proportionately fewer small plants are included; printing and publishing, and certain seasonal industries, such as canning and preserving, are not covered. For the month of November rates are based on reports from 6,900 establishments, employing 4,508,000 workers.

[2] Preliminary.

[3] Including temporary, indeterminate, and permanent lay-offs.

[4] Miscellaneous separations comprise not more than 0.1 in these figures. In 1939 these data were included with quits.

TABLE 2.—*Monthly labor turn-over rates (per 100 employees) in selected groups and industries,*[1] *December 1946*[2]

Industry group and industry	Total separation		Quit		Discharge		Lay-off		Military and miscellaneous		Total accession	
	Dec.	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.	Nov.
Manufacturing												
Durable goods	4.5	5.2	2.9	3.7	0.4	0.5	1.1	0.9	0.1	0.1	4.3	5.5
Nondurable goods	4.1	4.6	3.0	3.8	.3	.3	.7	.4	.1	.1	3.9	5.9
Iron and steel and their products	4.1	4.5	2.7	3.4	.3	.4	.9	.5	.2	.2	3.5	4.5
Blast furnaces, steel works, and rolling mills	3.0	3.3	2.3	2.6	.1	.2	.4	.3	.2	.2	2.3	2.9
Gray-iron castings	6.2	6.9	4.9	5.4	.6	.7	.5	.6	.2	.2	6.7	8.0
Malleable-iron castings	8.6	6.1	4.3	5.0	.6	.5	3.4	.4	.3	.2	8.1	7.7
Steel castings	4.2	4.0	2.1	2.9	.5	.4	1.4	.6	.2	.1	2.6	3.6
Cast-iron pipe and fittings	6.0	5.1	3.5	4.4	.2	.3	2.1	.3	.2	.1	6.3	6.3
Tin cans and other tinware	8.3	7.6	3.2	4.5	1.0	1.5	4.0	1.6	.1	(3)	3.5	6.6
Wire products	3.2	4.1	2.3	3.3	.4	.3	.3	.3	.2	.2	2.3	3.4
Cutlery and edge tools	4.5	5.9	3.2	4.1	1.2	1.5	.1	.2	(3)	.1	5.3	7.3
Tools (except edge tools, machine tools, files, and saws)	3.2	4.6	2.2	3.6	.4	.5	.4	.3	.2	.2	3.0	5.2
Hardware	4.6	5.6	3.7	4.6	.4	.5	.3	.4	.2	.1	4.9	6.4
Stoves, oil burners, and heating equipment	10.3	6.0	4.1	4.7	.9	.8	5.0	.4	.3	.1	9.6	8.2
Steam and hot-water heating apparatus and steam fittings	4.3	5.8	3.1	4.8	.3	.6	.8	.3	.1	.1	4.6	8.3
Stamped and enameled ware and galvanizing	6.0	6.3	3.9	5.0	.6	.5	1.3	.6	.2	.2	4.8	7.4
Fabricated and structural metal products	6.4	5.4	3.2	3.9	.4	.5	2.6	.8	.2	.2	5.5	6.3
Bolts, nuts, washers, and rivets	2.8	3.4	2.1	2.7	.2	.3	.4	.2	.1	.2	3.3	4.5
Forgings, iron and steel	4.8	4.1	2.0	2.2	.3	.3	2.4	1.5	.1	.1	3.3	3.3
Electrical machinery	3.7	4.2	2.6	3.3	.3	.4	.7	.4	.1	.1	3.6	5.3
Electrical equipment for industrial use	2.7	3.0	1.7	2.2	.2	.2	.6	.4	.2	.2	2.1	3.1
Radios, radio equipment, and phonographs	5.3	5.6	3.4	4.1	.6	.7	1.3	.7	(3)	.1	5.1	7.6
Communication equipment, except radios	2.6	2.9	2.3	2.5	.1	.2	.1	.1	.1	.1	3.4	4.1
Machinery, except electrical	3.3	3.8	2.1	2.7	.4	.4	.7	.6	.1	.1	3.7	4.5
Engines and turbines	4.6	3.9	2.2	2.7	.4	.5	1.9	.6	.1	.1	5.3	5.5
Agricultural machinery and tractors	(4)	3.7	(4)	2.9	(4)	.4	(4)	.3	(4)	.1	(4)	3.9
Machine tools	3.2	3.0	1.3	2.0	.3	.3	1.4	.6	.2	.1	1.8	2.5
Machine-tool accessories	3.9	4.2	1.9	2.7	.4	.4	1.5	1.0	.1	.1	2.7	4.2
Metalworking machinery and equipment, not elsewhere classified	2.9	3.3	2.4	2.8	.3	.3	.1	.1	.1	.1	2.9	3.6
General industrial machinery, except pumps	3.2	3.9	2.1	2.8	.4	.5	.6	.5	.1	.1	3.1	4.1
Pumps and pumping equipment	3.8	4.0	2.3	3.0	.8	.6	.6	.3	.1	.1	3.6	5.3
Transportation equipment except automobiles	7.5	7.5	3.1	3.3	.4	.4	3.9	3.7	.1	.1	7.3	8.4
Aircraft	4.2	6.6	2.5	3.1	.3	.3	1.3	3.1	.1	.1	4.6	6.0
Aircraft parts, including engines	5.1	4.6	2.1	2.6	.5	.5	2.5	1.5	(3)	(3)	4.2	5.8
Shipbuilding and repairs	13.2	11.6	4.7	4.2	.6	.6	7.8	6.7	.1	.1	13.0	12.7
Automobiles	3.9	5.7	2.5	3.3	.4	.6	.9	1.7	.1	.1	3.7	4.3
Motor vehicles, bodies, and trailers	3.9	5.8	2.5	3.3	.4	.7	.9	1.7	.1	.1	3.3	3.9
Motor-vehicle parts and accessories	4.0	5.6	2.5	3.2	.4	.4	.9	1.8	.2	.2	4.5	5.3
Nonferrous metals and their products	3.8	4.7	2.7	3.4	.5	.5	.5	.7	.1	.1	4.1	5.5
Primary smelting and refining, except aluminum and magnesium	3.5	3.6	2.3	2.6	.6	.7	.4	.1	.2	.2	3.2	4.5
Rolling and drawing of copper and copper alloys	2.3	3.0	2.0	2.6	.2	.2	.1	.1	(3)	.1	2.7	3.6
Lighting equipment	4.1	4.8	2.6	3.9	.7	.3	.6	.6	.2	(3)	5.2	6.3
Nonferrous-metal foundries, except aluminum and magnesium	3.7	4.8	2.6	3.7	.5	.5	.4	.4	.2	.2	3.9	5.7
Lumber and timber basic products	6.8	7.6	4.8	6.5	.3	.4	1.5	.6	.2	.1	5.7	8.1
Sawmills	7.4	7.7	4.7	6.6	.3	.4	2.2	.6	.2	.1	5.3	8.0
Planing and plywood mills	3.6	5.0	2.9	3.9	.3	.5	.2	.5	.2	.1	4.5	5.7
Furniture and finished lumber products	5.2	6.7	4.2	5.5	.6	.6	.3	.5	.1	.1	6.6	8.1
Furniture, including mattresses and bedsprings	4.9	6.7	3.9	5.4	.6	.7	.3	.5	.1	.1	5.9	7.8

See footnotes at end of table.

TABLE 2.—*Monthly labor turn-over rates (per 100 employees) in selected groups and industries,*[1] *December 1946*[2]—Continued

Industry group and industry	Total separation		Quit		Discharge		Lay-off		Military and miscellaneous		Total accession	
	Dec.	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.	Nov.
Manufacturing—Continuing												
Stone, clay, and glass products	3.7	4.3	2.7	3.2	0.4	0.6	0.5	0.4	0.1	0.1	3.7	4.5
Glass and glass products	3.2	4.2	1.8	2.6	.4	.7	.9	.7	.1	.2	3.0	4.0
Cement	4.5	4.8	3.7	4.0	.4	.6	.2	.1	.2	.1	4.2	4.7
Brick, tile, and terra cotta	5.3	5.6	3.9	4.6	.7	.7	.5	.3	.2	(3)	5.2	6.3
Pottery and related products	3.5	3.8	3.0	3.1	.3	.3	.1	.3	.1	.1	4.7	4.5
Textile-mill products	4.0	4.7	3.3	4.0	.3	.4	.3	.2	.1	.1	4.1	5.7
Cotton	4.9	5.8	4.2	5.1	.3	.4	.3	.2	.1	.1	4.8	6.8
Silk and rayon goods	3.7	4.2	3.1	3.6	.3	.2	.2	.3	.1	.1	3.6	4.7
Woolen and worsted, except dyeing and finishing	3.0	3.8	2.2	3.2	.3	.3	.4	.2	.1	.1	3.2	4.3
Hosiery, full-fashioned	2.6	2.7	2.1	2.3	.2	.2	.3	.1	(3)	.1	2.4	3.5
Hosiery, seamless	2.9	4.1	2.7	3.6	.1	.2	.1	.3	(3)	(3)	3.3	5.6
Knitted underwear	3.7	4.3	3.1	3.9	.4	.3	.1	.1	.1	(3)	4.0	5.9
Dyeing and finishing textiles, including woolen and worsted	2.4	3.4	1.5	2.2	.4	.7	.2	.4	.3	.1	2.9	4.8
Apparel and other finished textile products	4.4	4.8	3.7	4.3	.2	.2	.5	.3	(3)	(3)	4.3	6.2
Men's and boy's suits, coats, and overcoats	3.1	3.4	2.6	3.2	.2	.1	.3	.1	(3)	(3)	3.6	4.9
Men's and boys' furnishings, work clothing, and allied garments	4.0	4.7	3.8	4.4	.1	.2	.1	.1	(3)	(3)	4.1	6.3
Leather and leather products	3.8	4.1	3.0	3.5	.2	.2	.5	.3	.1	.1	4.4	4.9
Leather	2.7	2.7	1.7	2.1	.2	.2	.7	.3	.1	.1	3.6	4.1
Boots and shoes	3.9	4.3	3.3	3.7	.2	.2	.4	.3	(3)	.1	4.6	5.1
Food and kindred products	5.8	6.1	3.5	4.8	.5	.5	1.6	.7	.2	.1	5.0	9.3
Meat products	7.7	7.8	4.3	5.6	1.0	1.0	2.2	1.0	.2	.2	9.2	18.3
Grain-mill products	5.9	5.8	4.1	4.1	.5	.5	.7	1.1	.6	.1	4.3	6.2
Tobacco manufactures	3.9	5.0	3.1	4.0	.3	.3	.4	.5	.1	.2	2.9	5.3
Paper and allied products	3.9	4.8	3.0	3.9	.4	.5	.4	.2	.1	.2	3.9	5.2
Paper and pulp	3.3	4.0	2.4	3.1	.3	.5	.5	.2	.1	.2	3.2	4.2
Paper boxes	5.4	7.4	4.6	6.3	.6	.8	.1	.1	.1	.2	5.3	7.9
Chemicals and allied products	2.3	2.6	1.4	1.8	.2	.2	.6	.5	.1	.1	2.4	2.9
Paints, varnishes, and colors	2.3	2.2	1.5	1.7	.2	.2	.6	.3	(3)	(3)	2.2	2.8
Rayon and allied products	2.3	2.5	1.2	1.5	.2	.2	.8	.6	.1	.2	1.9	2.1
Industrial chemicals, except explosives	2.3	2.7	1.5	1.9	.3	.2	.4	.5	.1	.1	2.2	3.1
Products of petroleum and coal	1.3	1.5	.7	.9	.1	.1	.3	.4	.2	.1	1.0	1.4
Petroleum refining	1.3	1.4	.7	.8	.1	.1	.3	.4	.2	.1	.9	1.2
Rubber products	3.3	3.9	2.6	3.2	.3	.3	.3	.3	.1	.1	3.1	4.7
Rubber tires and inner tubes	2.5	3.0	2.0	2.5	.2	.2	.2	.2	.1	.1	1.9	3.2
Rubber footwear and related products	4.1	5.2	3.7	4.4	.3	.3	(3)	.4	.1	.1	5.1	6.6
Miscellaneous rubber industries	4.7	5.3	3.2	4.2	.6	.5	.7	.4	.2	.2	4.4	6.6
Miscellaneous industries	3.6	3.8	2.1	2.6	.3	.3	1.1	.8	.1	.1	2.8	4.3
Nonmanufacturing												
Metal mining	5.3	5.2	3.6	3.8	.4	.4	1.1	.8	.2	.2	6.1	6.2
Iron ore	4.0	3.5	1.7	1.7	.1	.2	1.8	1.3	.4	.3	2.3	2.6
Copper ore	4.8	6.0	4.0	4.9	.5	.5	.2	.5	.1	.1	7.9	7.9
Lead and zinc ore	4.4	5.4	3.7	4.3	.3	.4	.3	.5	.1	.2	7.1	7.8
Coal mining:												
Anthracite	1.6	1.5	1.2	1.1	(3)	(3)	.3	.3	.1	.1	1.7	1.7
Bituminous-coal	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Public utilities:												
Telephone	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Telegraph	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)

[1] Since January 1943 manufacturing firms reporting labor turn-over have been assigned industry codes on the basis of current products. Most plants in the employment and pay-roll sample comprising those which were in operation in 1939, are classified according to their major activity at that time, regardless of any subsequent change in major products.

[2] Preliminary.

[3] Less than 0.05.

[4] Not available.

[5] For the month of November rates for mining industries are based on reports from 195 establishments employing 97,000 persons.

TABLE 3.—*Monthly labor turn-over rates for men and women in all manufacturing and selected groups,*[1] *December 1946*[2]

Industry group	Men's rates (per 100 men)						Women's rates (per 100 women)					
	Total separation		Quit		Accession		Total separation		Quit		Accession	
	Dec.	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.	Nov.
All manufacturing	4.1	4.6	2.6	3.3	4.1	5.3	4.8	5.6	3.7	4.7	4.1	6.7
Durable goods	4.4	5.1	2.8	3.6	4.4	5.4	4.7	5.6	3.4	4.1	3.9	5.7
Nondurable goods	3.6	3.9	2.3	3.0	3.6	5.2	4.9	5.6	3.9	4.9	4.2	7.0
Iron and steel and their products	4.3	4.5	2.7	3.5	3.8	4.7	4.8	5.6	3.3	4.4	3.7	5.3
Electrical machinery	2.9	3.1	1.9	2.4	3.3	4.3	5.2	6.0	3.8	4.7	4.2	7.0
Machinery, except electrical	3.3	3.8	1.9	2.6	3.6	4.3	3.7	4.1	3.5	2.9	3.7	4.7
Transportation equipment except automobiles	7.1	8.0	3.1	3.4	7.3	7.9	4.5	5.8	2.5	2.7	3.2	4.2
Automobiles	3.7	5.2	2.3	3.2	3.4	4.1	4.5	6.6	2.4	3.3	4.1	5.3
Nonferrous metals and their products	3.8	4.5	2.6	3.2	4.3	5.4	4.1	5.5	2.9	4.2	3.5	5.7
Lumber and timber basic products	6.8	7.7	4.8	6.6	5.8	8.4	5.3	5.9	4.2	4.8	3.6	3.3
Furniture and finished lumber products	5.2	6.7	4.2	5.5	6.9	8.2	5.4	6.9	4.3	5.6	5.2	7.4
Stone, clay, and glass products	3.6	4.1	2.6	3.1	3.8	4.5	4.0	5.0	3.0	3.6	3.6	4.5
Textile-mill products	3.8	4.5	3.1	3.7	4.4	5.7	4.2	5.0	3.7	4.5	3.8	5.8
Apparel and other finished textile products	3.2	2.7	2.5	2.3	4.0	4.5	4.5	5.2	3.8	4.7	4.0	6.3
Leather and leather products	2.9	3.3	2.2	2.8	4.0	4.4	4.8	4.8	4.1	4.3	5.1	5.5
Food and kindred products	5.0	5.1	2.8	3.8	4.6	7.6	7.6	9.1	5.2	7.9	6.2	14.3
Tobacco manufactures	3.1	3.7	2.0	2.7	2.6	3.8	4.5	5.7	3.8	4.7	3.1	6.2
Paper and allied products	3.7	4.4	2.7	3.4	3.8	5.0	5.0	6.3	4.2	5.4	3.9	6.0
Chemicals and allied products	2.2	2.4	1.2	1.6	2.2	2.7	3.3	3.5	2.3	2.5	2.8	3.8
Products of petroleum and coal	1.2	1.4	.6	.8	.9	1.3	3.0	3.5	2.1	2.6	2.6	3.3
Rubber products	2.9	3.6	2.2	2.9	2.9	4.3	4.6	4.9	3.6	4.0	3.7	5.6
Miscellaneous industries	3.0	3.3	1.6	2.2	2.7	4.0	4.8	4.6	3.1	3.4	3.0	4.9

[1] These figures are based on a slightly smaller sample than that for all employees, inasmuch as some firms do not report separate data for women. Rates for November are based on 6,800 reports covering 4,265,000 employees.

[2] Preliminary figures.

Trends of Earnings and Hours

Summary of Earnings and Hours Data for December 1946

WEEKLY EARNINGS in manufacturing industries in January 1947 continued to average about $47, despite the half-hour drop in the average workweek to 40.5 hours. Record average hourly earnings of almost $1.16 were primarily responsible for maintaining the high level of weekly earnings.

Preliminary averages for January 1947 are as follows:

	Weekly earnings	*Weekly hours*	*Hourly earnings (in cents)*
All manufacturing	$46. 94	40. 5	115. 8
Durable goods	49. 47	40. 5	122. 2
Nondurable goods	44. 33	40. 6	109. 2

Final figures for December 1946 indicate that with the resumption of full-scale operations in the anthracite and bituminous coal mines, the respective weekly earnings of about $70 and $66 in these industries were not only the highest averages reported for December by any industry, but were also all-time records in coal mining. The average workweek of 46.7 hours in bituminous-coal mining in December was the longest ever reported for this industry, exceeding any workweek in the war or postwar periods. Other mining industries—copper, lead, and zinc—reported substantial increases in weekly earnings, with the return to the 6-day week.

Among the durable-goods manufacturing industries, weekly earnings in shipbuilding showed an increase of $5.67 between November and December, rising to $57.09. For the first time since VJ-day the workweek in this industry averaged 40 hours, reflecting new contracts for shipbuilding and ship repair.

Of the nondurables, the soap industry reported an increase in the average workweek of 2½ hours, reflecting the lifting of wartime production controls. In the sugar-refining industry, the flow of imports into the market relieved the material shortages and resulted in an increased workweek from 39.1 hours in November to 43.1 hours in December.

Since December 1945 average weekly earnings of production workers in manufacturing increased over $5.65, or 13 percent, with a 15-percent rise in hourly earnings. About 95 percent of the industries reported increases of more than 10 percent in hourly earnings, only 5 percent of the industries showed smaller increases. No industry reported a decrease in hourly earnings over the year.

Earnings and hours in manufacturing and nonmanufacturing industries

MANUFACTURING

Industry group and industry	Average weekly earnings [1]			Average weekly hours [1]			Average hourly earnings [1]		
	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1946	Nov. 1946	Oct. 1946
							Cents	Cents	Cents
All manufacturing	$46.86	$45.78	$45.73	40.9	40.2	40.5	114.5	113.9	113.0
Durable goods	49.51	48.60	48.90	40.8	40.2	40.7	121.2	121.0	120.2
Nondurable goods	44.14	42.86	42.45	41.0	40.2	40.2	107.6	106.5	105.6
Durable goods									
Iron and steel and their products	49.62	49.90	49.86	39.8	40.0	40.3	124.8	124.7	123.9
Blast furnaces, steel works, and rolling mills	48.59	50.82	50.39	37.0	38.8	38.7	131.4	131.0	130.3
Gray-iron and semisteel castings	53.80	52.80	53.36	42.6	41.8	42.8	126.3	126.3	124.8
Malleable-iron castings	51.75	51.74	52.27	40.6	40.4	40.9	127.7	128.2	127.7
Steel castings	51.72	51.87	50.27	39.8	39.9	38.9	130.0	129.8	129.3
Cast-iron pipe and fittings [2]	46.20	45.92	45.23	41.8	43.0	42.3	110.4	106.7	106.8
Tin cans and other tinware	44.79	42.68	44.68	40.8	39.1	40.8	110.4	109.7	110.0
Wirework	49.28	48.79	48.87	41.0	40.6	40.9	120.2	120.2	119.6
Cutlery and edge tools	47.50	46.41	46.49	43.3	42.7	43.0	109.5	108.6	108.0
Tools (except edge tools, machine tools, files, and saws)	50.00	49.03	49.01	43.2	42.4	42.9	115.8	115.8	114.1
Hardware	46.29	45.47	46.24	41.4	41.0	41.9	111.6	110.9	110.5
Plumbers' supplies	48.58	47.28	48.64	40.8	40.3	41.4	119.3	117.5	117.4
Stoves, oil burners, and heating equipment not elsewhere classified	49.65	48.73	48.89	41.3	40.6	41.0	120.2	119.8	119.2
Steam and hot-water heating apparatus and steam fittings	48.46	50.83	51.45	39.9	40.6	41.1	121.9	125.3	125.2
Stamped and enameled ware and galvanizing	48.26	46.14	46.83	41.1	39.9	40.7	117.1	115.9	115.0
Fabricated structural and ornamental metalwork	51.10	48.06	49.74	41.7	39.6	41.0	122.5	121.3	121.4
Metal doors, sash, frames, molding, and trim	53.54	51.45	51.58	42.8	40.8	41.6	124.9	126.1	124.0
Bolts, nuts, washers, and rivets	48.76	48.87	46.89	40.8	41.0	39.7	119.2	118.9	117.6
Forgings, iron and steel [2]	58.04	56.22	55.86	40.9	40.1	40.4	141.8	140.1	138.3
Screw-machine products and wood screws	51.80	51.50	52.13	42.8	42.5	43.3	121.0	121.2	120.4
Steel barrels, kegs, and drums	50.74	50.16	47.02	42.7	42.3	41.1	118.9	118.5	114.4
Firearms	53.37	53.17	51.10	40.5	40.8	40.7	131.8	130.4	125.6
Electrical machinery	49.22	48.28	48.28	41.1	40.6	40.7	119.8	119.0	118.6
Electrical equipment	49.91	49.06	48.92	40.6	40.2	40.3	122.6	122.1	121.3
Radios and phonographs	44.74	43.42	42.88	40.9	40.3	40.1	109.4	107.6	107.0
Communication equipment	51.89	50.71	51.36	42.7	42.1	42.7	120.7	120.0	120.3
Machinery, except electrical	52.80	52.06	52.57	41.4	40.9	41.5	127.7	127.2	126.6
Machinery and machine-shop products	52.62	51.38	51.91	41.8	41.1	41.6	125.7	124.9	124.5
Engines and turbines	56.88	55.57	55.38	41.5	40.5	41.1	137.1	137.0	136.5
Tractors	51.99	52.53	52.28	40.1	40.3	40.2	129.7	130.4	130.2
Agricultural machinery, excluding tractors	50.31	50.09	51.00	39.8	39.8	40.4	127.2	126.8	126.7
Machine tools	56.62	55.63	55.61	43.0	42.5	42.6	131.8	131.7	130.6
Machine-tool accessories [2]	59.78	58.08	58.70	43.2	42.1	42.6	138.1	138.0	137.8
Textile machinery	50.94	49.60	50.26	42.6	41.8	42.9	119.7	118.6	117.3
Typewriters	47.41	48.98	47.89	40.6	42.1	41.9	116.9	116.5	114.3
Cash registers, adding and calculating machines	56.37	58.42	57.34	40.6	41.8	42.3	139.5	140.6	136.6
Washing machines, wringers and driers, domestic	47.90	45.68	49.60	41.6	39.8	42.7	115.6	115.2	116.1
Sewing machines, domestic and industrial	54.19	52.63	52.63	41.8	40.8	41.2	129.7	129.1	128.2
Refrigerators and refrigeration equipment	47.71	47.67	49.71	38.0	38.3	40.2	125.2	124.3	123.7

See footnotes at end of table.

Earnings and hours in manufacturing and nonmanufacturing industries—Continued

MANUFACTURING—Continued

Industry group and industry	Average weekly earnings [1]			Average weekly hours [1]			Average hourly earnings [1]		
	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1946	Nov. 1946	Oct. 1946
Durable goods—Continued									
							Cents	*Cents*	*Cents*
Transportation equipment, except automobiles	$55.34	$52.35	$54.32	40.7	38.4	40.0	136.0	136.4	135.9
Locomotives	59.99	57.22	60.63	41.5	39.9	41.6	144.5	143.3	145.6
Cars, electric- and steam-railroad	52.80	52.62	51.75	41.8	41.3	41.8	126.3	127.5	123.9
Aircraft and parts, excluding aircraft engines	53.53	52.53	53.81	40.4	39.6	40.6	132.7	132.5	132.6
Aircraft engines	56.83	50.81	57.31	41.9	37.0	42.1	135.5	137.3	136.3
Shipbuilding and boatbuilding	57.09	51.42	53.96	40.0	35.7	37.7	142.3	144.1	143.2
Motorcycles, bicycles, and parts	55.31	52.39	53.24	43.2	41.2	42.6	127.9	127.0	125.0
Automobiles	55.44	53.71	53.41	39.7	38.5	38.8	139.5	139.4	137.6
Nonferrous metals and their products	50.49	49.27	48.92	41.8	41.0	40.9	120.8	120.3	119.5
Smelting and refining, primary, of nonferrous metals	49.26	48.09	47.80	41.0	39.8	40.0	121.1	120.7	119.6
Alloying and rolling and drawing of nonferrous metals except aluminum	54.37	52.56	51.93	42.5	41.0	40.7	128.1	128.3	127.5
Clocks and watches	45.41	45.46	44.81	41.2	41.6	41.6	109.9	109.3	107.8
Jewelry (precious metals) and jewelers' findings	50.78	48.49	49.91	44.3	42.6	43.8	114.9	114.9	114.6
Silverware and plated ware	58.35	55.47	56.42	46.6	44.9	46.1	125.2	123.2	122.2
Lighting equipment	46.31	46.77	45.92	39.5	39.9	39.1	117.9	117.8	117.5
Aluminum manufactures	48.97	48.21	46.94	40.6	39.9	39.4	121.5	120.8	119.2
Lumber and timber basic products	38.73	37.74	39.21	42.0	40.6	41.9	92.3	93.1	93.6
Sawmills and logging camps	36.97	36.37	37.84	41.5	40.2	41.5	89.1	90.6	91.3
Planing and plywood mills	44.23	41.86	43.49	43.4	41.8	43.2	101.6	100.4	100.5
Furniture and finished lumber products	42.54	41.62	41.73	42.2	41.7	42.2	100.8	99.9	99.0
Furniture	42.86	42.41	42.42	41.6	41.4	41.8	103.6	102.4	101.4
Caskets and other morticians' goods	44.59	42.86	42.66	43.5	41.9	42.5	103.0	102.4	100.3
Wood preserving	39.53	38.90	38.24	42.6	41.8	41.6	93.2	93.1	91.9
Stone, clay, and glass products	45.91	44.87	44.46	41.0	40.3	40.6	112.0	111.5	109.6
Glass and glassware	47.93	46.75	45.71	39.9	39.0	39.4	120.9	120.0	116.1
Glass products made from purchased glass	42.44	41.26	40.29	41.9	41.1	40.9	99.7	97.6	96.4
Cement	46.12	46.18	46.02	42.4	42.2	42.4	109.0	109.5	108.5
Brick, tile, and terra cotta	42.57	42.08	42.25	40.7	40.3	40.9	104.0	103.5	102.7
Pottery and related products	42.82	41.56	41.89	38.6	37.9	38.4	111.0	110.0	109.6
Gypsum	50.16	49.68	50.75	45.9	45.4	47.0	108.5	108.8	107.9
Lime	46.43	45.69	45.12	46.8	46.2	46.6	98.1	98.8	96.6
Marble, granite, slate, and other products	44.37	42.76	44.18	42.6	41.7	42.9	104.7	103.2	102.6
Abrasives	50.50	48.54	45.11	41.5	39.9	38.1	120.7	121.1	118.5
Asbestos products	50.79	50.18	49.86	42.7	41.9	42.0	118.8	119.8	118.7
Nondurable goods									
Textile-mill products and other fiber manufactures	39.26	38.38	38.09	40.9	40.2	40.2	95.9	95.5	94.8
Cotton manufactures, except smallwares	36.85	36.14	35.57	40.9	40.3	39.9	90.0	89.8	89.2
Cotton smallwares	39.64	38.09	39.00	41.0	39.7	40.6	96.7	96.1	96.1
Silk and rayon goods	39.53	38.69	38.67	41.8	41.1	41.6	94.4	94.1	93.1
Woolen and worsted manufactures, except dyeing and finishing	42.96	41.67	42.40	41.3	40.1	40.9	103.9	103.8	103.7
Hosiery	39.09	38.20	37.65	38.7	38.4	38.3	100.4	99.5	98.2
Knitted cloth	39.26	39.99	39.94	40.2	40.9	41.7	97.2	96.7	95.7
Knitted outerwear and knitted gloves	36.74	37.14	36.69	39.2	39.5	39.4	92.8	93.0	92.2
Knitted underwear	34.26	33.16	33.05	39.3	38.7	38.4	86.4	85.5	85.5
Dyeing and finishing textiles, including woolen and worsted	45.46	43.54	42.69	43.6	42.2	42.3	104.3	103.3	100.8
Carpets and rugs, wool	47.86	46.83	46.01	41.8	41.2	41.1	114.7	113.9	112.2
Hats, fur-felt	53.81	52.83	52.92	41.2	40.2	40.6	130.7	130.9	130.2
Jute goods, except felts	40.57	39.68	39.52	44.4	43.8	43.7	92.9	92.0	91.8
Cordage and twine	39.08	37.94	37.63	41.4	40.3	40.9	94.4	94.3	92.2

See footnotes at end of table.

Earnings and hours in manufacturing and nonmanufacturing industries—Continued

MANUFACTURING—Continued

Industry group and industry	Average weekly earnings [1]			Average weekly hours [1]			Average hourly earnings [1]		
	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1946	Nov. 1946	Oct. 1946
Nondurable goods—Continued									
							Cents	*Cents*	*Cents*
Apparel and other finished textile products	$37.24	$36.55	$36.68	37.0	36.6	36.8	100.7	99.9	99.7
Men's clothing, not elsewhere classified	41.95	41.39	38.89	38.0	37.8	37.7	108.9	108.6	102.4
Shirts, collars, and nightwear	33.22	32.04	30.39	38.1	37.6	37.4	86.8	84.7	80.9
Underwear and neckwear, men's	34.01	34.78	33.32	37.4	38.6	37.5	91.1	90.1	88.9
Work shirts	26.72	26.01	24.00	36.9	36.6	34.8	72.4	71.2	69.0
Women's clothing, not elsewhere classified	43.84	43.21	46.25	35.3	34.8	35.5	122.3	120.9	126.6
Corsets and allied garments	35.46	35.36	35.02	38.6	38.5	38.7	91.7	91.9	90.7
Millinery	38.69	35.97	43.01	30.5	28.7	32.3	104.6	104.6	111.0
Handkerchiefs	31.83	30.89	29.44	38.2	37.0	36.0	83.6	83.7	81.9
Curtains, draperies, and bedspreads	28.88	29.52	29.45	35.0	36.1	36.5	82.8	82.3	81.7
Housefurnishings other than curtains, etc.	36.47	36.69	33.06	40.0	40.0	36.4	90.9	91.3	90.3
Textile bags [3]	34.68	33.29	33.02	42.1	40.0	39.8	82.4	83.1	82.9
Leather and leather products	39.85	37.19	37.07	39.2	37.1	37.5	101.7	100.4	98.7
Leather	47.71	45.98	44.78	41.6	40.2	39.7	115.0	114.4	112.9
Boot and shoe cut stock and findings	37.32	35.72	36.24	38.7	37.4	38.7	97.0	96.1	93.6
Boots and shoes	38.65	35.76	35.65	38.8	36.3	36.9	99.5	97.8	96.0
Leather gloves and mittens	31.66	32.73	33.48	35.6	35.6	36.9	90.8	92.8	91.5
Trunks and suitcases	41.77	40.78	40.85	40.3	40.0	40.0	103.3	101.6	102.0
Food	46.94	44.83	43.85	44.4	42.8	42.4	105.8	104.7	103.5
Slaughtering and meat packing	51.73	51.15	43.06	46.4	44.9	37.5	111.9	113.7	114.7
Butter	42.11	40.09	41.39	46.8	44.7	46.5	90.5	89.5	89.2
Condensed and evaporated milk	44.50	43.16	43.41	46.5	46.3	46.7	95.7	93.3	92.9
Ice cream	48.84	46.86	47.54	46.6	46.0	47.6	100.4	97.6	96.8
Flour	54.58	51.77	52.45	50.4	48.2	48.8	108.5	107.5	107.6
Cereal preparations	47.81	47.12	48.28	40.9	40.7	42.0	117.0	115.7	114.9
Baking	47.55	46.01	45.45	45.3	44.0	43.6	105.1	104.5	104.2
Sugar refining, cane	44.70	38.90	37.40	43.1	39.1	37.4	103.7	99.6	100.1
Sugar, beet	54.35	49.59	40.86	52.1	48.6	40.5	104.4	102.1	100.9
Confectionery	38.19	36.79	35.04	41.4	39.8	39.5	90.2	90.5	87.4
Beverages, nonalcoholic	41.37	39.66	39.30	43.2	42.4	42.4	94.9	92.8	91.8
Malt liquors	59.79	56.68	56.57	43.8	42.5	42.5	136.5	133.3	133.0
Canning and preserving	37.87	35.31	40.82	38.8	37.2	41.7	98.5	95.3	98.3
Tobacco manufactures	38.12	36.66	36.47	40.2	39.7	40.3	94.7	92.4	90.5
Cigarettes	43.26	41.74	41.08	41.0	41.1	41.6	105.6	101.5	98.8
Cigars	34.85	33.27	33.48	39.9	38.6	39.6	87.1	85.7	84.4
Tobacco (chewing and smoking) and snuff	34.25	33.58	32.66	39.1	39.2	38.7	87.7	85.7	84.4
Paper and allied products	46.90	46.09	45.61	43.8	43.3	43.4	107.1	106.5	105.0
Paper and pulp	50.05	49.48	49.05	44.7	44.5	44.5	111.9	111.1	110.2
Envelopes	44.83	44.25	42.15	43.0	42.6	42.6	103.1	102.8	98.1
Paper bags	40.37	38.78	38.98	40.9	40.1	40.8	98.2	97.0	96.0
Paper boxes	43.73	42.55	42.02	43.2	42.3	42.5	100.7	100.7	99.0
Printing, publishing, and allied industries	56.90	55.01	54.28	41.4	41.0	41.0	137.3	134.2	132.5
Newspapers and periodicals	62.56	60.81	60.28	39.0	39.2	39.3	156.7	152.5	151.1
Printing, book and job	54.77	52.60	51.50	42.6	41.9	41.7	129.2	125.9	123.8
Lithographing	57.55	55.76	55.08	44.1	42.9	43.4	130.6	129.9	127.0
Chemicals and allied products	47.14	45.88	45.50	41.6	41.3	41.3	113.3	111.2	110.2
Paints, varnishes, and colors	49.38	48.16	47.07	42.4	41.8	41.6	116.7	115.4	113.4
Drugs, medicines, and insecticides	42.01	41.06	39.91	40.6	40.2	40.2	103.5	101.9	99.0
Soap	52.93	48.08	47.85	43.3	40.8	41.0	122.2	117.9	116.6
Rayon and allied products	43.76	43.31	42.98	39.2	39.1	39.2	111.7	110.7	109.7
Chemicals, not elsewhere classified	54.15	52.96	52.87	41.2	41.1	41.4	131.6	128.8	127.8
Explosives and safety fuses	51.50	49.53	50.26	40.7	39.8	40.7	126.4	124.3	123.4
Ammunition, small-arms	47.38	46.98	45.80	41.2	40.9	40.4	115.0	114.8	113.3
Cottonseed oil	36.52	35.14	33.47	53.2	52.6	51.9	68.5	66.8	64.5
Fertilizers	34.64	32.97	33.87	42.1	40.1	41.0	82.4	82.1	82.7
Products of petroleum and coal	55.04	54.49	54.38	40.1	40.3	40.4	137.4	135.1	134.7
Petroleum refining	58.55	57.11	57.32	40.4	40.0	40.2	145.1	142.9	142.8
Coke and byproducts	43.59	46.80	46.34	36.6	39.5	39.2	119.0	117.7	117.7
Roofing materials	50.90	51.10	49.46	44.0	44.4	44.2	115.4	115.0	112.0

See footnotes at end of table.

Earnings and hours in manufacturing and nonmanufacturing industries—Continued

MANUFACTURING—Continued

Industry group and industry	Average weekly earnings [1]			Average weekly hours [1]			Average hourly earnings [1]		
	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1946	Nov. 1946	Oct. 1946	Dec. 1946	Nov. 1946	Oct. 1946
Nondurable goods—Continued							*Cents*	*Cents*	*Cents*
Rubber products	$54.73	$52.98	$51.74	41.2	40.1	39.4	133.0	132.2	131.3
Rubber tires and inner tubes	60.55	58.87	57.38	40.0	39.0	38.2	150.9	150.3	149.2
Rubber boots and shoes	45.93	43.80	38.93	42.0	40.4	37.3	109.3	108.3	104.3
Rubber goods, other	48.68	46.86	47.00	42.7	41.5	41.6	114.5	113.1	113.0
Miscellaneous industries	45.71	44.98	45.04	41.4	41.0	41.4	110.3	109.7	108.8
Instruments (professional and scientific), and fire control equipment	52.20	51.01	51.23	40.7	40.1	40.6	126.9	125.8	125.2
Pianos, organs, and parts	48.43	51.09	48.31	41.0	43.0	42.0	119.0	119.8	115.1
NONMANUFACTURING									
Mining:							*Cents*	*Cents*	*Cents*
Anthracite	$65.80	$56.57	$61.82	40.7	35.7	39.2	161.3	158.2	159.3
Bituminous coal	69.56	61.54	62.49	46.7	41.7	42.9	149.1	147.7	146.0
Metal	52.00	48.58	49.63	42.2	39.8	41.0	123.2	121.9	121.0
Iron	47.89	46.36	48.06	39.7	38.4	40.3	120.7	120.7	119.3
Copper	55.26	50.71	51.66	45.1	41.7	42.3	122.9	121.7	122.0
Lead and zinc	53.79	48.63	49.23	42.4	39.5	40.2	126.8	123.2	122.4
Quarrying and nonmetallic	47.95	47.40	48.28	45.6	45.4	46.1	105.2	104.5	104.7
Crude petroleum production	54.80	55.78	53.72	40.6	41.7	41.2	135.3	133.6	130.8
Public utilities:									
Telephone	42.98	44.40	44.30	38.0	39.3	39.1	113.2	113.1	113.7
Telegraph [2]	45.94	46.25	47.37	43.2	43.5	44.4	106.2	106.3	106.7
Electric light and power	54.58	53.61	53.18	41.4	41.6	41.9	133.7	130.2	128.4
Street railways and busses	55.26	54.64	55.62	47.9	47.3	47.7	114.2	112.5	113.0
Trade:									
Wholesale	51.20	49.80	49.44	42.3	41.6	41.9	120.2	118.6	117.2
Retail	33.73	33.04	33.19	40.2	39.6	40.1	91.9	91.8	90.7
Food	41.19	40.42	40.16	40.7	40.3	41.0	97.8	97.0	94.3
General merchandise	28.29	27.63	27.65	36.0	35.1	35.7	76.5	76.4	75.7
Apparel	35.52	34.74	34.98	37.0	36.3	36.5	97.1	96.7	96.0
Furniture and housefurnishings	49.39	47.26	45.84	43.7	43.6	43.3	115.6	110.1	107.4
Automotive	50.61	48.74	48.82	47.2	46.1	46.1	109.3	108.6	107.9
Lumber and building materials	44.78	43.32	43.70	43.5	42.3	43.1	103.8	104.1	103.3
Hotels (year-round) [4]	28.40	28.15	27.27	43.7	43.8	43.8	65.1	64.2	62.6
Power laundries	32.13	31.05	30.52	43.5	42.6	43.0	73.9	72.9	70.8
Cleaning and dyeing	36.50	35.32	35.81	42.8	41.9	42.2	86.7	85.4	85.4
Brokerage	64.48	62.00	62.24	([3])	([3])	([3])	([3])	([3])	([3])
Insurance	52.25	51.24	51.20	([3])	([3])	([3])	([3])	([3])	([3])

[1] These figures are based on reports from cooperating establishments covering both full- and part-time employees who worked or received pay during any part of one pay period ending nearest the 15th of December 1946. The figures shown below relate to firms reporting man-hour data in all cases except brokerage and insurance; weekly earnings are based on a slightly larger sample (see footnote 1, tables 1 and 4).

Manufacturing.—31,600 establishments, 7,200,000 production workers.
Mining.—2,600 establishments, 350,000 production workers.
Public utilities.—6,500 establishments, 733,000 employees.
Wholesale trade.—8,600 establishments, 238,000 employees.
Retail trade.—27,300 establishments, 870,000 employees.
Hotels (year-round).—900 establishments, 81,000 employees
Power laundries and cleaning and dyeing.—1,300 establishments, 58,000 production workers.
Brokerage and insurance.—3,400 establishments, 156,000 employees.

For manufacturing, mining, power laundries, and cleaning and dyeing industries, the data relate to production workers only. For the remaining industries the data relate to all employees except high paid executives and officials. Data for the current and immediately preceding months are subject to revision.

[2] Revisions have been made as follows in the data for earlier months:

Cast-iron pipe and fittings.—December 1945 to $40.12.
Forgings, iron and steel.—September 1946 to $54.22.
Machine-tool accessories.—September 1945 to $50.11 and 119.3 cents. December 1945 through May 1946 to $53.08, $53.53, $52.99, $54.78, $53.92, and $54.74; December 1945 through September 1946 to 43.6, 43.3, 42.6, 42.8, 41.9, 41.7, 42.3, 41.1, 41.8, and 42.5 hours. New series on average weekly and hourly earnings beginning June 1946; not comparable to previously published data. June through September 1946 data are $56.36, $54.63, $56.89, and $58.76; 133.1, 133.0, 136.1, and 138.0 cents. Comparable data for May are $55.66 and 133.3 cents.
Textile bags.—September 1946 to $32.48 and 82.1 cents.

[3] Excludes messengers, and approximately 6,000 employees of general and divisional headquarters, and of cable companies.

[4] Cash payments only, additional value of board, room, and tips, not included.

[5] Not available.

Trend of Factory Earnings, 1939 to December 1946

THE PUBLISHED AVERAGE EARNINGS of factory workers, summarized in the accompanying table for selected months from January 1939 to December 1946,[1] are on a gross basis (i. e., before deductions for social security, income taxes, bond purchases, etc.).

Weekly earnings in all manufacturing averaged $46.86 in December 1946—102.1 percent above the average in January 1939, 75.9 percent above January 1941, and 20.5 percent above October 1942. Weekly earnings for December 1946 increased 13.7 percent above December 1945, however, the average weekly earnings are still below the wartime peak of $47.50 in January 1945, as the result of shorter working hours and shifts of workers from the high paid war industries to the lower paid consumer goods industries.

Gross hourly earnings in all manufacturing averaged 114.5 cents in December 1946—81.2 percent above the average in January 1939, 67.6 percent above January 1941, and 28.2 percent above October 1942.

Straight-time average hourly earnings, as shown in columns 7 to 9, are weighted by man-hours of employment in the major divisions of manufacturing for January 1941. These earnings are estimated to exclude premium pay at time and a half for work in excess of 40 hours. However, the effect of extra pay for work on supplementary shifts and on holidays is included. For all manufacturing, the straight-time average in December 1946 was 110.6 cents per hour; this was 72.5 percent above January 1939, 66.6 percent above January 1941, and 37.1 percent above October 1942.

[1] Compare Trends in Factory Wages, 1939–43, in Monthly Labor Review, November 1943 (p. 869), especially table 4 (p. 879). For detailed data regarding weekly earnings, see preceding table.

Earnings of factory workers in selected months, 1939 to December 1946

Month and year	Average weekly earnings			Average hourly earnings			Estimated straight-time average hourly earnings [1] weighted by January 1941 employment		
	All manufacturing	Durable goods	Nondurable goods	All manufacturing	Durable goods	Nondurable goods	All manufacturing	Durable goods	Nondurable goods
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1939: January	$23.19	$25.33	$21.57	$0.632	$0.696	$0.583	$0.641	$0.702	$0.575
1940: January	24.56	27.39	22.01	.655	.717	.598	.652	.708	.589
1941: January	26.64	30.48	22.75	.683	.749	.610	.664	.722	.601
1942: January	33.40	38.98	26.97	.801	.890	.688	.751	.826	.668
July	36.43	42.51	28.94	.856	.949	.725	.783	.863	.696
October	38.89	45.31	30.66	.893	.990	.751	.807	.888	.718
1943: January	40.62	46.68	32.10	.919	1.017	.768	.819	.905	.726
April	42.48	48.67	33.58	.944	1.040	.790	.833	.916	.742
July	42.76	48.76	34.01	.963	1.060	.806	.850	.939	.753
October	44.86	51.26	35.18	.988	1.086	.824	.863	.950	.768
December	44.58	50.50	35.61	.995	1.093	.832	.873	.962	.775
1944: January	45.29	51.21	36.03	1.002	1.099	.838	.877	.965	.780
April	45.55	51.67	36.16	1.013	1.110	.850	.889	.976	.795
July	45.43	51.07	37.05	1.018	1.116	.862	.901	.993	.802
October	46.94	53.18	37.97	1.031	1.129	.878	.908	.991	.817
December	47.44	53.08	38.39	1.040	1.140	.883	.912	.997	.820
1945: January	47.50	53.54	38.66	1.046	1.144	.891	.920	1.005	.827
April	47.12	52.90	38.80	1.044	1.138	.899	.925	1.007	.536
July	45.12	50.60	38.59	1.032	1.126	.902	.933	1.017	.842
October	40.97	44.23	37.76	.985	1.063	.909	.942	1.014	.863
December	41.21	44.08	38.52	.994	1.066	.927	.957	1.028	.880
1946: January	41.15	43.67	38.75	1.004	1.070	.941	.970	1.037	.895
April	42.88	45.71	40.13	1.058	1.131	.988	1.027	1.102	.946
July	43.38	46.24	40.46	1.093	1.177	1.009	1.067	1.155	.970
October	45.73	48.90	42.45	1.130	1.202	1.056	1.095	1.169	1.014
November [2]	45.78	48.60	42,86	1.139	1.210	1.065	1.106	1.181	1.023
December [2]	46.86	49.51	44.14	1.145	1.212	1.076	1.106	1.177	1.028

[1] The method of estimating straight-time average hourly earnings makes no allowance for special rates of pay for work done on major holidays. Estimates for the months of January, July, September, and November, therefore, may not be precisely comparable with those for the other months, in which important holidays are seldom included in the pay periods for which manufacturing establishments report to the Bureau. This characteristic of the data does not appear to invalidate the comparability of the figures for January 1941 with those for the preceding and following months.

[2] Preliminary.

Recent Publications of Labor Interest

March 1947

Cooperative Movement

Operations of consumers' cooperatives [in the United States] in 1945. Washington, U. S. Bureau of Labor Statistics, 1947. 16 pp. (Bull. No. 890.) 10 cents, Superintendent of Documents, Washington.

Report of the Administrator of the Rural Electrification Administration, 1946. Washington, U. S. Department of Agriculture, 1946. 37 pp., maps, charts. 5 cents, Superintendent of Documents, Washington.

Contains information on the effects of the rural electrification program on rural industry, community canneries, schools, and health. One section of the report deals with the electricity cooperatives, which constitute over 90 percent of all borrowers from the Rural Electrification Administration.

Housing cooperatives. By Irving H. Flamm. (*In* Lawyers Guild Review, New York and Washington, September-October 1946, pp. 590–595; also reprinted.)

It is the author's belief that "home ownership lends itself to cooperation far more advantageously than does mercantile enterprise." He explains why this is so, reviews the legal status of housing cooperatives, and points out the various advantages of cooperative housing to the cooperator and to the national economy.

Construction cooperatives in Italy. By A. S. Carbone. (*In* Bombay Cooperative Quarterly, Bombay, India, June 1946, pp. 8–16. 7s.)

An engineer formerly employed by the workers' productive associations operating in the construction industry in Italy (one of the few countries in which these associations have been important) describes how these associations work and tells of some of their projects.

Tax liability of cooperatives. New York, Commerce and Industry Association of New York, Inc., Bureau of Research, 1946. 20 pp.

Examination of the tax situation of both farm and nonfarm cooperatives. Makes no recommendations regarding taxation of patronage refunds, but expresses the opinion that income-tax returns (from all cooperatives) should contain detailed information as to each patron's interest in the cooperative's earnings, whether distributed or retained, and as to member and nonmember business, allocation of reserves, etc.; that each patron should receive from the association a certificate showing the amount to his credit; and that Congress should define what constitutes the "reasonable reserves" permitted to exempt farmer cooperatives.

Cost and Standards of Living

Chicago standard budget for use by social agencies. Chicago, Council of Social Agencies of Chicago, 1946. 63 pp.; processed. Rev. ed.

Food for four income levels—prices for San Francisco, September 1946. By Ruth Okey, Mary Gorringe Luck, Grace Bodenhamer. Berkeley, University of California, Heller Committee for Research in Social Economics, 1946. 45 pp.; mimeographed.

The quantity and cost budgets presented cover weekly food allowances for families and individuals, sample menus for families of four, and possible substitutions.

EDITOR'S NOTE.—Correspondence regarding the publications to which reference is made in this list should be addressed to the respective publishing agencies mentioned. Where data on prices were readily available, they have been shown with the title entries.

Current living costs as related to standards of public assistance in Pennsylvania, December 1946. Harrisburg, Department of Public Assistance, 1947. 27 pp.; mimeographed.

Rural family living, October 1946—annual outlook issue. Washington, U. S. Department of Agriculture, Bureau of Human Nutrition and Home Economics, 1946. 50 pp.; mimeographed.

Gives data on trends in farm family incomes and expenditures, savings, medical care, education, housing, food prices and supply, and nutrition. A chart book, issued separately, supplements the report.

Employment and Employment Service

Planning and paying for full employment. Edited by Abba P. Lerner and Frank D. Graham. Princeton, N. J., Princeton University Press, 1946. 222 pp. $3.

Papers prepared by 11 economists on the basis of extensive discussions at a conference at Princeton University in 1944 called by the American Labor Conference on International Affairs. The purpose of the conference was to discuss all aspects, including international relations, of the question of how to achieve peacetime full employment in the United States. The papers indicate general agreement as to the vital role of national planning within the limits of democratic freedom.

Public investment and full employment. Montreal, International Labor Office, 1946. 348 pp. (Studies and reports, new series, No. 3.) $1.75. Distributed in United States by Washington Branch of I. L. O.

This report is concerned with the international importance of domestic public investment as a means to help stabilize employment and income at high levels. It examines the difficulties entailed in the timing of public investment as an antidepression measure and suggests methods by which the difficulties may be minimized. The experiences and programs of various countries are described. An appendix contains recommendations and resolutions on the subject, adopted from 1919 to 1945 by the International Labor Conference.

Chart book of employment and pay rolls in Canadian industries: Employment, 1939–August 1, 1946; Pay rolls, 1941–August 1, 1946. Ottawa, Department of Reconstruction and Supply, Economic Research Branch, 1946. 57 pp.

Employment service organization. Montreal, International Labor Office, 1946. 350 pp. (Report V (I), fifth item on agenda, International Labor Conference, 30th session, Geneva, 1947.) $1.75. Distributed in United States by Washington Branch of I. L. O.

The major part of the volume consists of a general report covering employment-service organization and functions, management-labor collaboration with the employment service, international cooperation among employment services, and other phases. Services of 31 individual countries are described in an appendix

Handicapped Workers

Laws relating to the physically handicapped—special compilation to November 15, 1945. Prepared for Committee on Labor Subcommittee on Aid to the Physically Handicapped, House of Representatives, 79th Congress, 2d session. Washington, Government Printing Office, 1946. 223 pp. (House doc. No. 753, 79th Cong., 2d sess.)

The physically impaired worker in industry. Washington, U. S. Bureau of Labor Statistics, 1947. 6 pp. (Serial No. R. 1869; reprinted from Monthly Labor Review, December 1946.) Free.

An employment survey conducted by American Hearing Society. By Charles G. Bluett and Ada Morgan Hill. Washington, American Hearing Society, 1946. 20 pp. 50 cents.

Analysis of information obtained by questionnaire from 562 hard-of-hearing persons, most of whom had better than average education and appeared to be better adjusted than the hard of hearing in the general population.

Sightless workers in industry. By Kathleen M. Jones and Freda Polansky. (*In* Modern Management, Society for the Advancement of Management, Inc., New York, January 1947, pp. 5–8, 30, bibliography, illus. 75 cents.)

Employment of Canada's disabled—veterans and others: Part 1, Basic considerations; Part 2, The selective placement process. Ottawa, Department of Veterans Affairs, [1946?]. 15 and 56 pp.

Housing

Housing and citizenship: A study of low-cost housing. By George Herbert Gray. New York, Reinhold Publishing Corporation, 1946. 254 pp., bibliography, charts, plans, illus. $7.50.

An exhaustive report dealing with the historic and philosophic as well as the social, economic, and technological background of housing in both the U. S. and Europe. Shows how public housing policy has developed, illustrated with accounts of many projects and showing their advantages and shortcomings. There are chapters dealing with determining factors in cost of housing and rent and with designs for low-cost dwellings. Accomplishments of various Federa housing agencies in the United States are reviewed and appraised. The author also presents a comprehensive program for postwar housing in this countryl including therein an outline of policies that should be changed and a proposa for a national council of housing.

Mutual housing—a veterans guide: Organizing, financing, constructing, and operating several selected types of cooperative housing associations, with special reference to available Federal Aids. Washington, U. S. National Housing Agency, 1946. 55 pp.

Although intended for veterans, the guide is also valuable for other groups. It should be used in connection with U. S. Bureau of Labor Statistics' Bulletin No. 858, Organization and management of cooperative and mutual housing associations.

Subsistence homesteads projects, their past, present, and future. By Oliver C. Winston. (*In* Journal of Housing, Chicago, October 1946, pp. 223–225, illus.)

Review of the whole homesteads program, including steps taken under the "liquidation" program. Brings out many facts not generally known about the projects.

The cost of slums in Newark. By Jay Rumney and Sara Shuman. Newark N. J., Housing Authority, 1946. 36 pp., bibliography, charts, illus.

Analysis of housing and other conditions and costs in slums as compared with other areas of the city.

Building code requirements for new dwelling construction, recommended by the National Housing Agency and prepared in consultation with the National Bureau of Standards. Washington, U. S. Department of Commerce, National Bureau of Standards, 1946. 43 pp. (Building materials and structures report BMS 107, superseding BMS 88.) 20 cents, Superintendent of Documents, Washington.

Functions of government and builders in neighborhood planning. By Herman T. Stichman. White Plains, N. Y., Westchester County Department of Planning, 1946. 11 pp.

Address delivered at a conference of municipal planning and housing officials in Westchester County, in which the necessity for control of planning by local officials was stressed.

Greenbelt cities—the British contribution. By F. J. Osborn. London, Faber & Faber, Ltd., 1946. 191 pp., bibliography, diagrams, illus. 12s. 6d. net.

Describes British greenbelt towns from the standpoint of use and control of land, administration, local government and finance, social life and culture, and what the towns offer for the future. The author believes that the best results, in future developments, will come through large-scale planning (rather than through many small builders) and work carried out by skilled developers and technicians trained in a special school for the purpose.

Income

National income—a summary of findings. By Simon Kuznets. New York, National Bureau of Economic Research, Inc., 1946. 144 pp. (Twenty-fifth anniversary series, No. 1.) $1.50.

Summary of the various publications by the National Bureau of Economic Research in the field of national income and wealth, covering the period from 1869 to 1938 with emphasis on the period from 1919 to 1938. The tables included show total and per capita income, distributions of various kinds, and changes during business cycles. A final section deals with problems of interpretation.

Readings in the theory of income distribution. Selected by a committee of the American Economic Association. Philadelphia, Blakiston Co., 1946. 718 pp., bibliography, charts. (Blakiston series of republished articles on economics, Vol. III.) $4.25.

Studies in income and wealth, Volume 8. By Conference on Research in Income and Wealth. New York, National Bureau of Economic Research, Inc., 1946. 297 pp., charts. $3.

Papers presented at Conference on Research in Income and Wealth in April 1944. The papers were devoted largely to definitions of concepts and to discussions of methods and sources. They included discussions of consumption and the distribution of income. Much attention was given to international comparisons including comparisons of productivity, economic welfare, purchasing power, and economic structure. China, Germany, and Russia were given special consideration in addition to the United States.

China's national income, 1931–36—an exploratory study. By Ta-Chung Liu. Washington, Brookings Institution, 1946. 91 pp. $1.

A study of Chinese production and consumption, agricultural and non-agricultural, set up insofar as possible with comparable data for the United States for the same period with adjustments for differences in prices, in marketing structure for agricultural products, in unpaid family services, and in savings-consumption ratios. The estimates are in terms of gross national product, no effort having been made to deduct depreciation and business taxes.

A new estimate of China's national income. By Pao-san Ou. (*In* Journal of Political Economy, Chicago, December 1946, pp. 547–554. $1.)

Brief summary and analysis of income estimates prepared by the Institute of Social Sciences of Li-chung and recently published in a two-volume Chinese edition. Detailed estimates for 1933 are extended back to 1931 and forward to 1936, subject, the author states, to a wide margin of error. The estimates are in terms of net national product, depreciation having been deducted.

Industrial Hygiene

Aniline. Benzene (benzol). Washington, U. S. Department of Labor, Division of Labor Standards, 1946. 14 and 24 pp., bibliographies. (Controlling chemical hazards series, Nos. 5 and 6.) 5 and 10 cents, respectively, Superintendent of Documents, Washington.

Carbon tetrachloride—properties [and] essential information for safe handling and use. Washington, Manufacturing Chemists' Association of the United States, 1946. 11 pp. (Chemical safety data sheet SD–3.) 20 cents.

Health and miscellaneous hazards in metal mines. Washington, U. S. Department of the Interior, Bureau of Mines, 1946. 68 pp., bibliography, diagrams, illus. (Miners' circular No. 57; Metal-mine accident-prevention course, section 7.) 20 cents, Superintendent of Documents, Washington.

Industrial physical examinations. By F. E. Poole, M.D. (*In* Journal of the American Medical Association, Chicago, January 11, 1946, pp. 91–97. 25 cents.)

Considers objectives, methods, and use of physical examinations in industry and related questions.

Use of different types of aluminum powder in the prevention and treatment of silicosis, together with a general review of the subject. Report of a visit to Canada and the United States (April to July 1946), by W. E. George. Sydney, New South Wales, Department of Labor and Industry and Social Welfare, 1946. 78 pp., bibliography. (Supplement to N. S. W. Industrial Gazette, September 1946.)

Industrial Relations

A national labor relations policy in essential industries. By Joseph H. Ball. (*In* Public Utilities Fortnightly, Washington, January 2, 1947, pp. 3–11. 75 cents.)

Analysis of needed changes in Federal labor legislation affecting essential industries, including public utilities, by a member of the United States Senate.

Eleventh annual report of the National Labor Relations Board, for the fiscal year ended June 30, 1946. Washington, 1947. 198 pp., charts. 35 cents, Superintendent of Documents, Washington.

Describes the policy of the National Labor Relations Board as evolved in both representation and unfair labor practice cases, and discusses action of Federal courts in enforcing, reversing, or modifying that policy. Contains the text of the Board's rules and regulations and of statutory provisions administered by it, a list of cases heard and decisions rendered in the fiscal year, and detailed statistical tables setting forth case data.

Free collective bargaining or government intervention. By Emily Clark Brown. (*In* Harvard Business Review, Vol. XXV, No. 2, Boston, winter 1947, pp. 190–206. $1.50.)

Labor relations and the public. Edited by Herman Feldman. (*In* The Annals, Vol. 248, American Academy of Political and Social Science, Philadelphia, November 1946, pp. 1–198. $2 (paper) or $2.50 (cloth) to nonmembers.)

Manual of industrial relations. By staff of Executive's Labor Letter. Deep River, Conn., National Foremen's Institute, Inc., 1946. 185 pp., loose-leaf. $7.50.

Chapters are devoted to employee morale, grievances, wages, training, the collective-bargaining agreement, unions, foremen, Federal labor legislation, and compulsory arbitration.

The status of foremen as "employees" under the National Labor Relations Act. By Herman E. Cooper. (*In* Fordham Law Review, New York, November 1946, pp. 191–221. $1.)

Collective agreements in the coal mining industry in Canada, September 1946. (*In* Labor Gazette, Department of Labor, Ottawa, December 1946, pp. 1692–1707; also reprinted.)

Industry Reports

Manufacturing industries, 1944–45: No. 30, Rubber works. Canberra, Bureau of Census and Statistics, 1946. 7 pp.; processed.

One of a series of reports giving results of surveys of 33 different Australian industries, showing number of factories and workers, quantity and value of products, minimum weekly rates of wages and hours of labor as of June 30, 1945, and other data.

A well-paid man's job: There's a future in coal. London, Ministry of Labor and National Service in collaboration with Ministry of Fuel and Power, [1946]. 14 pp., illus.

Issued for the purpose of recruiting labor, the pamphlet briefly summarizes present-day working conditions in the British coal-mining industry with respect to wages, hours, training, safety and health, welfare facilities, and liability for military service, and tells the worker how to enter the industry. A page is devoted to the immediate future in this field.

Board of Trade working party reports: Jewelry and silverware. London, H. M. Stationery Office, 1946. 105 pp., illus. 3s. net.

Over-all study of the industry, including brief discussions of recruitment of labor, working conditions, and training of young workers.

Final report of the Jute Industry Factory Advisory Committee. London, Ministry of Labor and National Service, 1946. 55 pp., diagrams, illus. 1s. net, H. M. Stationery Office, London.

Report of Committee representing employers, workers, and the Ministry of Labor and National Service, set up in November 1944 to advise on improving working conditions in the jute industry. Recommendations pertain to ventilation, cleanliness, fencing and spacing of machinery, washing facilities, establishment of medical and welfare services, and similar matters.

Steel—the facts about monopoly and nationalization. By Henry Owen. London, Lawrence & Wishart, Ltd., 1946. 136 pp. 4s. net.

The author points out unfavorable conditions in the British iron and steel industry, such as obsolescent plant, monopolistic prices, and irregular employment. A section on wages and the workers gives details on methods of wage payment and rate structure, unions in the industry, and method of negotiating collective agreements.

Proceedings at the special meeting of the Transvaal Chamber of Mines, Johannesburg, October 25, 1946. Johannesburg, Transvaal Chamber of Mines, 1946. 22 pp.

Speech by G. Carleton Jones, president of the Transvaal Chamber of Mines, discussing working costs and profitability of the Transvaal gold mines. The speech was delivered 2 months after native workers struck for a wage increase.

Labor and Social Legislation

Labor laws of the State of Iowa, edition 1946. Des Moines, Bureau of Labor, 1946. 87 pp. (Bull. No. 20.)

Kentucky labor laws. [Frankfort], Department of Industrial Relations, 1946. 40 pp.

Nebraska labor laws administered by Department of Labor. [Lincoln], Department of Labor, 1946. 38 pp.

Laws of Texas relating to labor, May 1946. Austin, Bureau of Labor Statistics, [1946?]. 223 pp.

Labor laws and mining laws of the Commonwealth of Virginia. Richmond, Department of Labor and Industry, 1946. 91 pp.

Legislación social americana: Ley general sobre conflictos colectivos de trabajo en El Salvador. (*In* Protección Social, Caja de Seguro y Ahorro Obrero, La Paz, Bolivia, October 1946, pp. 60–71.)

Labor Organizations and Activities

Admission policies of labor unions. By Clyde W. Summers. (*In* Quarterly Journal of Economics, Cambridge, Mass., November 1946, pp. 67–107. $1.25.)

Analysis of provisions of union constitutions, and of the practices of unions aside from those laid down in the constitutions, with respect to admission to membership. A somewhat less detailed article by the author on this subject, entitled "The right to join a union," was published in the Columbia Law Review for January 1947.

Getting along with unions. By Russell L. Greenman and Elizabeth B. Greenman. New York, Harper & Bros., 1947. 158 pp. $2.50.

A study, from management's standpoint, of what to expect and how to proceed in bargaining with unions, written from the experiences and observations of the authors.

Labor unions, the public, and the law. By Buel W. Patch. Washington (1205 19th Street NW.), Editorial Research Reports, 1947. 20 pp. (Vol. 1, 1947, No. 1.) $1.

El movimiento obrero latinoamericano. By Moisés Poblete Troncoso. Pánuco, México, Fondo de Cultura Económica, 1946. 296 pp., bibliography. (Colección Tierra Firme, 17.)

Summarizes legislative provisions, in national constitutions and laws, recognizng the right of workers to organize, and gives a history of the development of labor organization in each of 19 Latin American countries.

Report of proceedings at the 78th annual Trades Union Congress, Brighton, October 21–25, 1946. London, Trades Union Congress. [1946?]. 606 pp.

Trade unions in Britain. (*In* Labor and Industry in Britain, British Information Services, New York, Washington, etc., January 1947, pp. 14–24, bibliography. Free.)

Reviews the legislative history of British trade-unions back to 1825; describes the organizational structures of trade-unions and employers' associations; and gives statistics of trade-union membership, 1936–46, and of income and expenditures, 1936. Some space is devoted to collective bargaining, prevention and settlement of disputes, joint production committees, and works councils.

The story of the engineers, 1800–1945. By James B. Jefferys. London, Lawrence & Wishart, Ltd., [1946]. 301 pp., bibliographical footnotes. 10s. 6d.

History of the British union which is most similar to the International Association of Machinists in the United States, written to commemorate the 25th anniversary of the amalgamation, in 1920, of a number of unions into the Amalgamated Engineering Union. A much larger amalgamation has recently occurred between this union and the Confederation of Engineering and Shipbuilding Unions, bringing together over 1¼ million workers in one organization.

The history is divided into four periods for each of which the changing character of the machinery manufacturing trades, the tools, and the skills are considered, from the standpoint of the effect on status of the worker, working conditions, and trade-union structure and tactics. The story is told with a wealth of detail and a critical evaluation of union policies, especially for the earlier periods.

Medical Care and Health Insurance

Health-benefit plans by collective bargaining. Washington, American Federation of Labor, 1946. 12 pp. (Collective bargaining series, No. 1.)

Guide for AFL unions planning to negotiate health-benefit provisions in collective-bargaining agreements.

State legislation for cash sickness benefits. Princeton, N. J., Princeton University, Industrial Relations Section, January 1947. 4 pp. (Selected references, No. 13.) 10 cents.

Northern California Union Health Committee. [San Francisco, Northern California Union Health Committee, 1946?] 11 pp.; processed.

The committee serves in an educational and technical capacity to further the health of trade-unionists and their families in the San Francisco area. It reports that it is developing a pattern for enlisting joint labor participation in community health projects, and lists a wide variety of activities which it has carried on in the fields of industrial hygiene and safety, public health, and medical care.

Regulations relating to [California State] unemployment compensation disability insurance. [Sacramento, Department of Employment?], 1946. 21 pp.; mimeographed.

Consists of regulations adopted in the latter part of 1946 on the subjects of disability, claims for disability benefits, and voluntary disability plans, under the new State system of disability insurance.

Health insurance plan of Greater New York: A modern plan for medical care. By Albert Pleydell. (*In* American Journal of Economics and Sociology, New York, January 1947, pp. 195–204. $1.)

After 2 years of intensive planning, New York City's community-wide prepaid medical care program is ready to function. It offers comprehensive medical service in the home, doctor's office, or hospital, under groups of practitioners (paid on a capitation basis) located at convenient points in the area. Subscription is by group at place of employment, the employer bearing half of the cost for each subscribing employee and family. Both management and unions have shown interest.

Personnel Management

Human factors in management. By Schuyler Dean Hoslett. Parkville, Mo., Park College Press, 1946. 322 pp. $4.

Brings together some of the results of research and reflection within the past decade related to the "intangibles" of human relations such as the motivations, feelings, sentiments, and satisfactions of people. Emphasis is placed on "the individuality of the person and the conception of human groups as dynamic social systems in which the 'feelings' of people are more important than the 'logics' of organization charts, rules, regulations, and directives."

Human relations and efficient production. New York, National Association of Manufacturers, 1946. 24 pp.

Check list to guide management in appraising its employee policies. The list includes a series of questions directed towards enabling an employer to evaluate practices on such matters as employee selection and placement, seniority, wage rates, and grievance procedure.

Music in industry. New York, National Industrial Conference Board, Inc., 1947. 32 pp., charts. (Studies in personnel policy, No. 78.)

Of the 262 plants and offices covered in the National Industrial Conference Board's survey, 111, or 42.4 percent, were using some type of music for employee work or recreation. The report discusses sources and costs of industrial music, its effects on work situations, employee response to music, and other details.

Personnel management practices. By six industrial executives. Melbourne, Institute of Industrial Management, 1946. 84 pp.

Series of six lectures, by experts in personnel management, covering training, services and working conditions, wage incentives, employee-management committees, safety, etc., in Australian industry.

Population

Population in modern China. By Ta Chen. (*In* American Journal of Sociology, Chicago, July 1946, part 2; 126 pp.)

Discussion of methods used in and results of a special population census in the Kunming Lake region of China, conducted by the author (director of the Institute of Census Research, Tsing Hua University, Kunming), and information on other regional censuses in China. One of the seven chapters is devoted to occupations and another to migration. Pertinent statistics from various published sources are given in an appendix.

L'emploi de la main-d'œuvre de nationalité étrangère. (*In* Revue Française du Travail, Ministère du Travail et de la Sécurité Sociale, Paris, August-September 1946, pp. 515–522.)

Results of a 1945 census of foreigners over 15 years of age in France, tabulated to show numbers of Austrian, Belgian, British, German, Italian, Polish, Russian, Spanish, Swiss, and various Balkan nationalities in the main geographic areas, and the principal industries and occupations in which they were employed. Some comparisons with similar data for 1936 are provided.

The population of the Soviet Union—history and prospects. By Frank Lorimer. Geneva, League of Nations, Economic, Financial, and Transit Department, 1946. 289 pp., bibliography, charts, maps. $4, Columbia University Press, New York.

Exhaustive well-documented demographic study of the Soviet Union, covering not only the dynamics of population growth but also the ethnic and economic backgrounds. Chief emphasis is placed on the period from 1926 (when the most complete census was made) to 1939. One chapter deals with the trends in occupations and production during this period.

Reconstruction

Michigan's major agricultural problems, with suggested solutions. Report of the Agricultural Advisory Committee of the Michigan Planning Commission. Lansing, Michigan Planning Commission and Michigan State College, Agricultural Extension Service, 1946. 29 pp.

Reemployment in agriculture and medical care in rural areas are among the 19 problems considered.

Economic recovery in the countries assisted by UNRRA. Washington, United Nations Relief and Rehabilitation Administration, 1946. 182 pp.

Countries covered are Albania, Austria, China, Czechoslovakia, Greece, Italy, Poland, and Yugoslavia.

Labor's program for British industry. By Grant S. McClellan. (*In* Foreign Policy Reports, New York, January 15, 1947, pp. 254–263. 25 cents.)

Brief popular review of the program and performance of the Labor Government in nationalization of industries, and in planning for the private sector of industry, including brief mention of continuing labor controls, development areas, and measures to finance reconstruction.

Report on Britain. (*In* Labor and Industry in Britain, British Information Services, New York, Washington, etc., December 1946, pp. 181–216, charts. Free.)

The purpose of this special issue of Labor and Industry in Britain is to show how the objective of large-scale economic and social planning on a democratic basis is working out in practice. A foreword entitled "Pattern of British reconstruction" outlines the general plan and summarizes the historical and legislative background for postwar reconstruction in the fields of industry, labor, finance, and foreign trade.

Economic reconstruction in Yugoslavia: A practical plan for the Balkans. By George Radin. New York, King's Crown Press (for Carnegie Endowment For International Peace), 1946. 161 pp., maps.

The plan, primarily for rural areas, is built largely about the Yugoslav cooperative associations (*zadrugas*), and "foresees in their development the possibility of postwar economic and educational reconstruction."

Veterans' Affairs

State veterans' legislation enacted during 1946. Chicago, Council of State Governments, 1946. 31 pp.; mimeographed. 75 cents.

State veterans' loan laws. Washington, U. S. Department of Labor, Retraining and Reemployment Administration, 1946. Variously paged; mimeographed. Free.

Typical State statutes creating State agencies for the administration of veterans' affairs. Compiled by Office of Solicitor, U. S. Department of Labor. Washington, U. S. Department of Labor, Retraining and Reemployment Administration, September 1946. Variously paged; mimeographed. Free.

Readjustment of veterans to civilian life. Washington, U. S. Bureau of Labor Statistics, 1947. 9 pp. (Serial No. R. 1867; reprinted from Monthly Labor Review, November 1946.) Free.

The disabled veteran in the Federal civil service. Washington, U. S. Civil Service Commission, 1946. 15 pp., chart, illus.

Report to veterans and their organizations, and to the appointing officer of the Federal civil service, to facilitate the utilization of disabled veterans in the Federal service.

Veterans—back on the job: Some suggestions for supervisors. Washington, Federal Security Agency, Division of Personnel Management, 1946. 13 pp. (Training manual No. 5.)

The suggestions are introduced by the statement that the Federal Security Agency has set its sights above and beyond the requirements of law in establishing a policy to be followed in dealing with veterans.

Reinstatement in civil employment. By Hector Hughes. London, Staples Press, Ltd., 1946. 76 pp. 2s. 6d.

This analysis of the British Reinstatement in Civil Employment Act, 1944, was intended as a guide for men and women returning to civil employment from military service. An appendix contains the text of the Act as well as statutory rules and orders issued under it.

Wages and Hours of Labor

Wage structure, Series 2, No. 26: Department and clothing stores, 1945. Washington, U. S. Bureau of Labor Statistics, 1947. 55 pp., charts; processed. Free.

Other reports recently issued in the wage-structure series cover bakeries, limited-price variety stores, manufacture of footwear, power laundries, radios, and warehousing. The data are for 1945.

Ninth report of the New York State Salary Standardization Board. [Albany], 1946. 186 pp.

Submits schedules of salaries determined by the Board for standard positions in the State service.

1946 salary rates for municipal positions in the State of Washington. Seattle, Bureau of Public Administration of the University of Washington, and Association of Washington Cities, 1946. 19 pp.; mimeographed.

Rates are given by occupation for each of 158 cities.

Rates of pay and conditions of employment of sanitation laborers in 18 cities in the United States in 1946. By Sonya K. Essin. Philadelphia, Bureau of Municipal Research of Philadelphia, June 1946. 7 pp.; processed.

Your working time problem under the wage and hour law. Washington, Bureau of National Affairs, 1946. 133 pp.; processed. $3.

Intended as a practical working tool for lawyers, executives, and union officials interested in obtaining an impartial and objective analysis of "time worked" under the Fair Labor Standards Act, with particular reference to back-pay claims. Voluminous supporting data are presented.

Le problème des salaires et la conjoncture mondiale. (*In* Études et Conjoncture, Économie Mondiale, Ministère de l'Économie Nationale, Institut National de la Statistique et des Études Économiques, Paris, November 1946, pp. 15–45.)

Opening with a survey of income and expenditure in the United States, Great Britain, and Canada, 1938–45, the main body of the study covers changes in real wages, 1938–46, in the countries for which wage and cost-of-living statistics are provided by League of Nations and International Labor Office publications. The countries are grouped on the basis of changes in living standards due to changes in real wages. Detail on methods of price and wage control and on subsidies are included.

Women in Industry

Employment of women in the United States in the early postwar period, with background of prewar and war data. Washington, U. S. Department of Labor, Women's Bureau, 1946. 14 pp. (Bull. No. 211.) 10 cents, Superintendent of Documents, Washington.

The legal status of women in the United States of America, 1938–45. Washington, U. S. Department of Labor, Women's Bureau, 1946. 31 pp. (Bull. No. 157–A; cumulative supplement to Bull. No. 157.) 10 cents, Superintendent of Documents, Washington.

Report of the Royal Commission on Equal Pay, [*Great Britain*], *1944–46.* London, H. M. Stationery Office, 1946. 220 pp. (Cmd. 6937.) 4s. net.

Summarizes information as to wage differentials of men and women in various fields of work, the causes of such differentials, and the social and economic consequences that would result from the adoption of equal pay in the economy generally and in specific fields.

The main report holds that women's lower wages are due to less demand for women, an important cause of which is their lower efficiency, and that while

equal pay in national and local government employment and in teaching would probably not have adverse effects, in private industry and commerce it would be detrimental to the national output and to employment opportunities for women.

A memorandum of dissent by three of the four women members of the Commission holds that wage differentials are due to artificial restrictions against the employment of women and weak trade-union organization of women, and that equal pay in industry would widen the sphere of women's employment and contribute to national productivity.

Report of the 16th annual conference of unions catering for women workers, London, June 21 and 22, 1946. London, Trades Union Congress, 1946. 52 pp. 9d.

Women workers in Paraguay. Washington, U. S. Department of Labor, Women's Bureau, 1946. 16 pp., illus. (Bull. No. 210.) 10 cents, Superintendent of Documents, Washington.

General Reports

The United States at war: Development and administration of the war program by the Federal Government. Washington, U. S. Bureau of the Budget, [1946.] 555 pp., charts. (Historical reports on war administration, No. 1.) $1, Superintendent of Documents, Washington.

The volume represents an attempt to supply an objective report of what the Government sought to do during the war, its methods of procedure, and the success achieved. Mobilization and allocation of labor, the production program, price and wage control, rationing of food and other commodities, and emergency legislation are covered.

Labor's first year—the facts. London, Labor Party, 1946. 40 pp. 2d.

Italie: [Situation économique en Italie]. (*In* Études et Conjoncture, Économie Mondiale, Ministère de l'Économie Nationale, Institut National de la Statistique et des Études Économiques, Paris, October 1946, pp. 35–51.)

Survey of Italian economic situation early in 1946, covering population, returned war prisoners, industrial and agricultural production, financial conditions, foreign commerce, and wages and prices (with indexes). Some comparative data are given for earlier years back to 1938.

Évolution de la situation économique du Maroc de 1939 à 1946. (*In* Études et Conjoncture, Union Française, Ministère de l'Économie Nationale, Institut National de la Statistique et des Études Économiques, Paris, October 1946, pp. 57–78.)

Includes data on population, mineral and agricultural production, foreign commerce, rationing (for Europeans), and wages and prices (indexes) in Morocco.

Report of the [New Zealand] National Service Department [for the 12 months ending March 31, 1946]. Wellington, 1946. 156 pp., charts.

Contains information on war manpower control measures and their operation, establishment of the National Employment Service, and employment trends from 1939 to 1945.

Annual report of Palestine Department of Labor, for 1945. Jerusalem, 1946. 32 pp. (No. 10.) 200 mils.

Anuario estadístico de España, 1945–46. Madrid, Instituto Nacional de Estadística, 1946. 1,357 pp., charts.

This general statistical yearbook includes index numbers of wholesale prices, by commodity group, 1934–45, of cost of living, 1939–45, and of wages, different dates, 1930–44; number of industrial accidents, 1921–42; number of strikes, 1944, 1945; social insurance benefits, 1944, 1945; and employment of foreign workers, by nationality, place of residence in Spain, and occupation, 1945.

U. S. GOVERNMENT PRINTING OFFICE: 1947